

A Field Guide to the Management of Economically Important Tephritid Fruit Flies in Africa

Edited by
S. Ekesi and M. K. Billah

Second Edition



With the financial support of
Federal Ministry
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African
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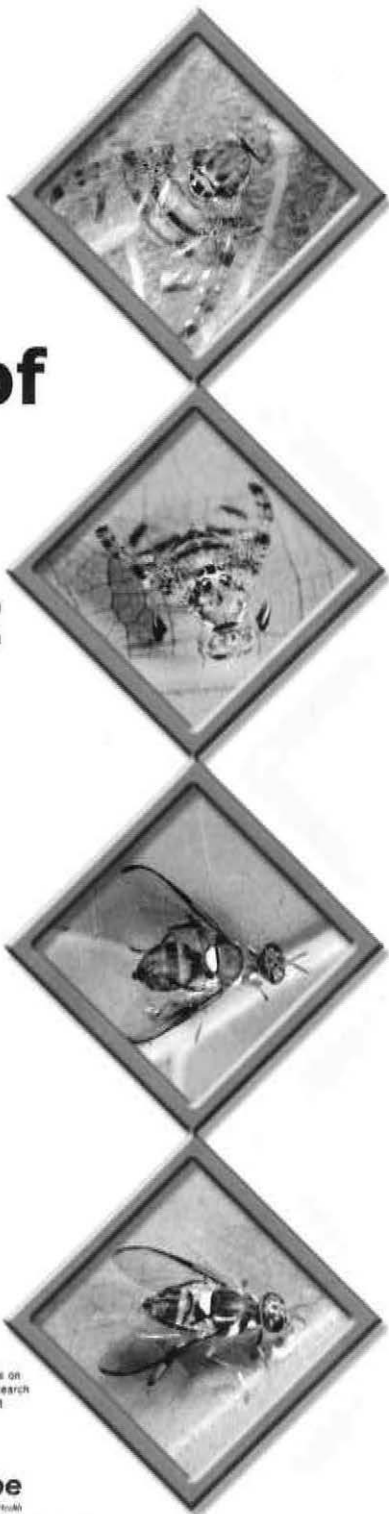
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African Insect Science for Food and Health

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Cover photographs: From the top: *Ceratitis fasciventris* Bezzi, *Ceratitis rosa* Karsch, *Dacus ciliatus* Loew and *Bactrocera invadens* Drew, Tsuruta & White

FIGURES—Figure 1: Eggs, puparia (M. K. Billah); larvae (S. Ekesi); adult flies (R.S. Copeland); **Figures 2–6 (inset), Figures 8–9 (inset), Figure 11 (inset), Figures 13–18 (inset):** (R.S. Copeland); **Figure 10:** (F.E. Appiah); **Figure 12:** (A. Manrakhan); **Figure 19:** (S.A. Mohamed); **Figure 20:** (M.K. Billah); **Figures 21A, 24B, 25C & D, 28A, C & D, 31A & B, 32A, B & C, 33A & B, 34B, 38A & B, 39A & B, 40A** (M.K. Billah); **Figures 21 B & C, 22B, 23D, 24C** (M. De Meyer); **Figures 21D, 22A & C, 23A–C, 24D, 25B, 26B–D, 27A–D, 28B** (I.M. White), Natural History Museum (NHM); **Figures 30, 26B, 40B** (R.S. Copeland); **Figures 22A, 24A, 25A, 26A, 29A & B, 34A, 35, 36A, 37A & B** (G. Goergen)

PLATES—Plate 1A–F: Courgette (J.-F. Vayssieres); mango (M.K. Billah); tomato (A. Manrakhan); **Plates 2–4, 7–9, 12–13, 15, 17, 26–28, 30:** (M.K. Billah); **Plates 5–6, 10–11, 14, 16:** (A. Manrakhan); **Plates 18–22, 24–25:** (S. Ekesi); **Plates 23, 29:** (S.A. Mohamed); **Plates 31–36:** (R.S. Copeland)

A FIELD GUIDE TO THE MANAGEMENT OF ECONOMICALLY IMPORTANT TEPHTRITID FRUIT FLIES IN AFRICA

S. Ekesi and M. K. Billah (Editors)

2nd Edition

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Introduction

Fruit and vegetable production is one of the fastest-growing agricultural sectors in Africa, providing both income and employment to growers and exporters alike. The range of fruits and vegetables grown is diverse. Mangoes, citrus, apple, papaya, passion, guava, avocado, cucumber, pumpkin and watermelon are among the most common fruits and vegetables grown for domestic urban markets and for export to major outlets in Europe, the Middle East, Japan and USA. This growth is changing the dietary patterns leading to increased consumption of fruits and vegetables. However, different types of insect pests afflict production in Africa, and perhaps none has gained greater notoriety than the fruit flies (Diptera: Tephritidae). The enormous losses they cause through direct damage to fruits and vegetables and loss of market opportunities through imposition of strict quarantine regulations by importing countries to prevent entry and establishment of fruit flies demand urgent need for implementation of sustainable management practices for fruit flies control. The introduction of uniform and strict quarantine restrictions and the maximum residue level (MRL) regulations in the European Union compound the existing fruit fly problem and jeopardise the lucrative export of fresh fruits and vegetables from Africa. Lack of local expertise in fruit fly management makes it difficult to respond in a timely and efficient manner to the challenges imposed by fruit flies. The correct identification of fruit flies occurring in a particular area and their damage symptoms is a first step towards developing appropriate management strategies.

At the concluding meeting of the first phase of an FAO TCP project on surveillance and management of the invasive fruit fly species *Bactrocera invadens* in East Africa, and the Dutch Programme for Cooperation with International Institutions (Netherlands-SII) and IFAD-sponsored International Group Training Course on Fruit fly Management in October 2005, representatives of National Plant Protection Organisations (NPPOs) of participating countries expressed the need for development of a field manual for management of economically important tephritid fruit flies in Africa in view of the fruit fly-related trans-boundary invasions arising from increased travel and trade in fruits and vegetables. A request was therefore made to FAO to provide funds for the development of the 1st Edition of the manual in support of their fruit fly management activities in the region and the International Centre of Insect Physiology and Ecology (*icipe*) was mandated to develop the manual. The 1st Edition published in 2006 was well received as an indispensable reference book for agricultural scientists, extension workers and quarantine specialists involved in fruit fly monitoring, detection and management.

Since the publication of the 1st Edition, many new advances have taken place in the various subjects especially on bioecology, monitoring and detection, field suppression and taxonomy of the economically important

fruit flies in Africa. This new information has been incorporated in the 2nd Edition generously funded by the USDA-APHIS and BMZ. The field guide provides information on the life cycle, damage symptoms, distribution and host plants of major fruit fly species of fruits and vegetables in Africa. The purpose, tools and methodology for fruit fly monitoring, suppression and host fruit processing and handling are also comprehensively covered. Additionally, brief sections on safety precautions during monitoring and suppression, and packaging, handling and shipment of specimens to facilitate identification are provided. The field guide also provides a simple, user-friendly taxonomic key to all the common fruit fly species to allow for rapid identification of the major species found on fruits in Africa. In addition to the four invasive *Bactrocera* species on the continent, other morphologically similar and closely related species to *B. invadens* such as *B. dorsalis*, *B. kandiensis* and *B. correcta* have been included in this edition. Fortunately, these species are also strongly attracted to methyl eugenol, and it is therefore important that methyl eugenol catches are carefully examined (and not assumed to be only *B. invadens*) to avoid the possibility of any new detections going unnoticed. This manual is to be considered as a 'working document' to be regularly updated as fruit fly taxonomy and management techniques continue to improve and global experience in control programmes continues to expand.

CHAPTER 1

Tephritid Fruit Flies in Africa— Fact Sheets of Some Economically Important Species

Sunday Ekesi and Eric Muchugu

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Generalised life cycle

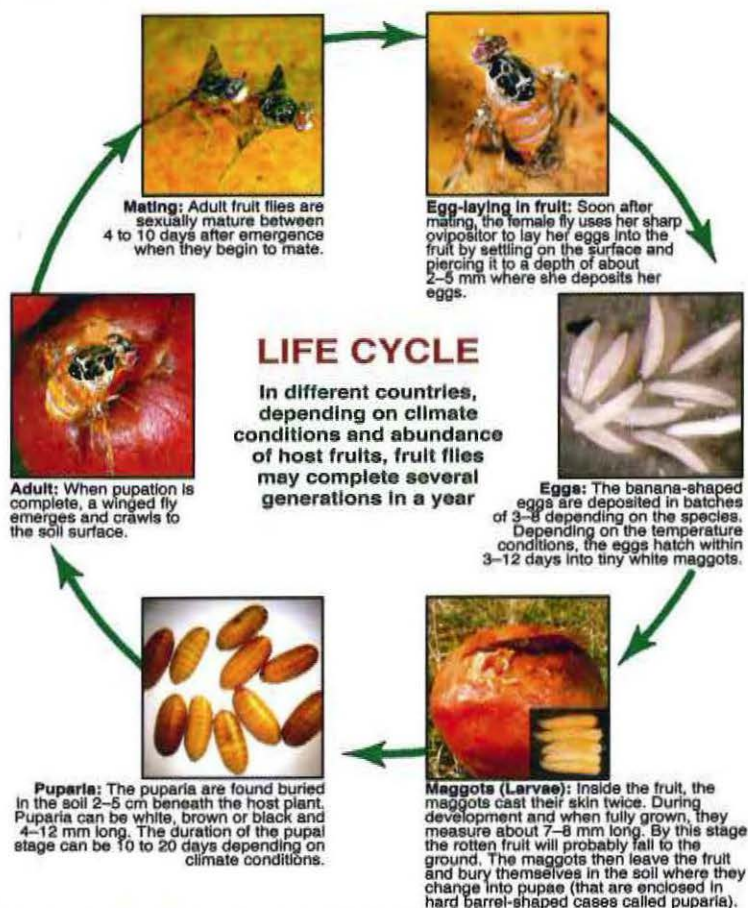


Figure 1. Generalised life cycle of tephritid fruit flies

Damage symptoms

- **Direct damage:** Direct damage begins when the female fly punctures the fruit skin and lays eggs underneath it. Damage symptoms vary from fruit to fruit (**Plate 1 a–f**). During egg laying, fruit-rotting bacteria from the intestinal flora of the fly are introduced into the fruit. These bacteria multiply and cause the tissues surrounding the egg to rot. When the eggs hatch, the rotten fruit tissue makes it easier for the larvae to feed. The puncture and feeding galleries made by developing larvae (**Plate 1 d–f**) provide access for pathogens to develop and increase the fruit decay. Generally, the fruit falls to the ground as, or just before the maggots pupate.
- **Indirect losses:** Nearly all fruit fly species are quarantine pests. Indirect losses result from quarantine restrictions that are imposed by importing countries to prevent entry and establishment of unwanted fruit fly species.

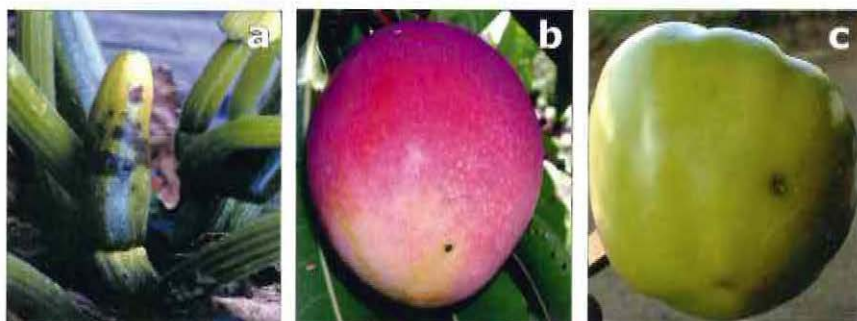


Plate 1 a–c. External damage symptoms on fruit: a, courgette; b, mango; c, tomato



Plate 1 d–f. Internal damage symptoms on fruit: d, courgette; e, mango; f, tomato

Species, distribution and host plants

Ceratitis cosyra (Walker) (Diptera: Tephritidae)

Common name: Mango fruit fly

Distribution: *Ceratitis cosyra* (Figure 2, inset) is widespread in Africa and has been reported from Benin, Democratic Republic of Congo, Côte d'Ivoire, Kenya, Madagascar, Malawi, Mali, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, Sudan, Tanzania, Uganda, Zambia and Zimbabwe (White and Elson-Harris, 1992; Copeland *et al.*, 2006; S. Ekesi, unpublished data) (Figure 2).

Host plants: Typical host range of *C. cosyra* includes mango (*Mangifera indica*), guava (*Psidium guajava*), sour orange (*Citrus aurantium*), marula (*Sclerocarya birrea*), wild custard apple (*Annona senegalensis*) and wild apricot (*Landolphia* sp.) (White and Elson-Harris, 1992; Copeland *et al.*, 2006; S. Ekesi, unpublished data) (Annex 1). There are also other records from the family Anacardiaceae, Anisophylleaceae, Annonaceae, Apocynaceae, Chrysobalanaceae, Combretaceae, Ebenaceae, Fabaceae, Flacoutiaceae, Lauraceae, Myrtaceae, Passifloraceae, Rosaceae and Rubiaceae (De Meyer *et al.*, 2002) (Annex 1).

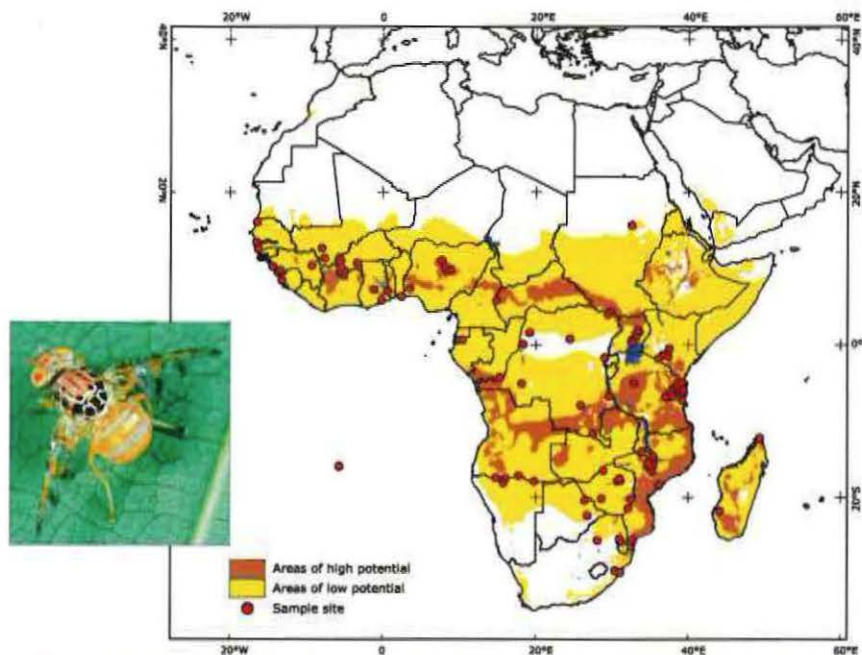


Figure 2. Distribution and potential *Ceratitis cosyra* zones in Africa. Inset: Adult *Ceratitis cosyra* (See page B-20 for notes on species distribution maps)

***Ceratitis rosa* Karsch (Diptera: Tephritidae)**

Common name: Natal fruit fly

Distribution: *Ceratitis rosa* (Figure 3 inset) is known from Angola, Ethiopia, Democratic Republic of Congo, Kenya, Malawi, Mali, Mauritius, Mozambique, Nigeria, Réunion, Rwanda, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe (White and Elson-Harris, 1992; Copeland et al., 2006) (Figure 3). For global distribution and predictions see De Meyer et al. (2008).

Host plants: The host range of *C. rosa* is broad, recorded from over 100 fruit species (White and Elson-Harris, 1992; De Meyer et al., 2002; Copeland et al., 2006) (Annex 1). In most of Africa, it damages mango (*Mangifera indica*), papaya (*Carica papaya*), guava (*Psidium guajava*) and custard apple (*Annona reticulata*). It is also a common pest of coffee (*Coffea arabica*) in eastern Africa (Annex 1).

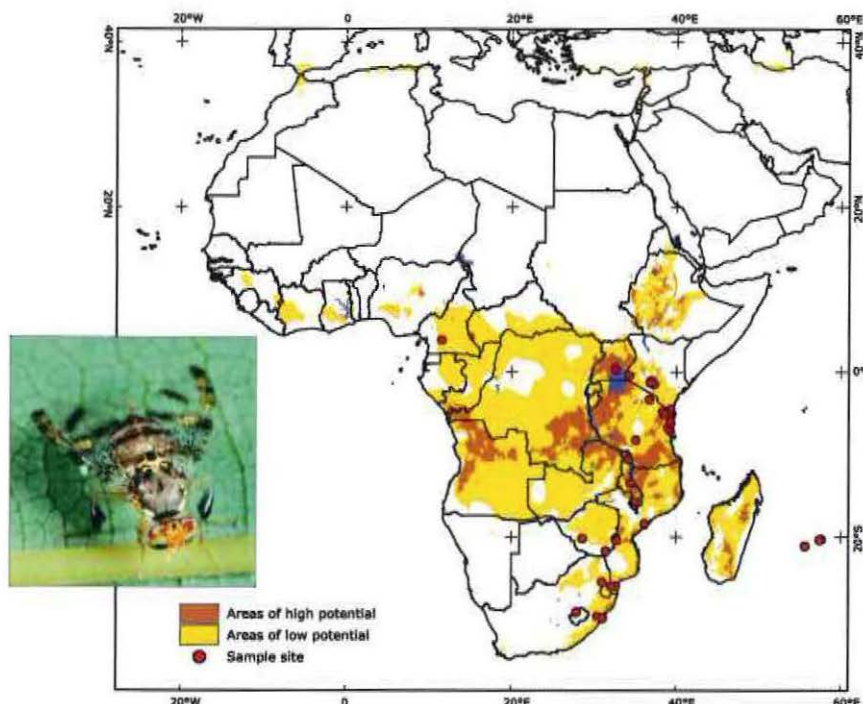


Figure 3. Distribution and potential *Ceratitis rosa* zones in Africa.
Inset: Adult *Ceratitis rosa*

***Ceratitis fasciventris* Bezzi (Diptera: Tephritidae)**

Distribution: *Ceratitis fasciventris* (Figure 4, inset) was formerly regarded as a variety of *C. rosa*. It occurs in Côte d'Ivoire, Democratic Republic of Congo, Ethiopia, Ghana, Guinea, Kenya, Mali, Nigeria, Sao Tomé & Príncipe, Tanzania and Uganda (White and Elson-Harris, 1992; Copeland et al., 2006; M. Billah, unpublished data) (Figure 4).

Host plants: Recorded from over 40 plant species (De Meyer et al., 2002; Copeland et al., 2006) (Annex 1). It is a major pest of mango (*Mangifera indica*), guava (*Psidium guajava*) and coffee (*Coffea arabica*) in eastern and western Africa (Annex 1).

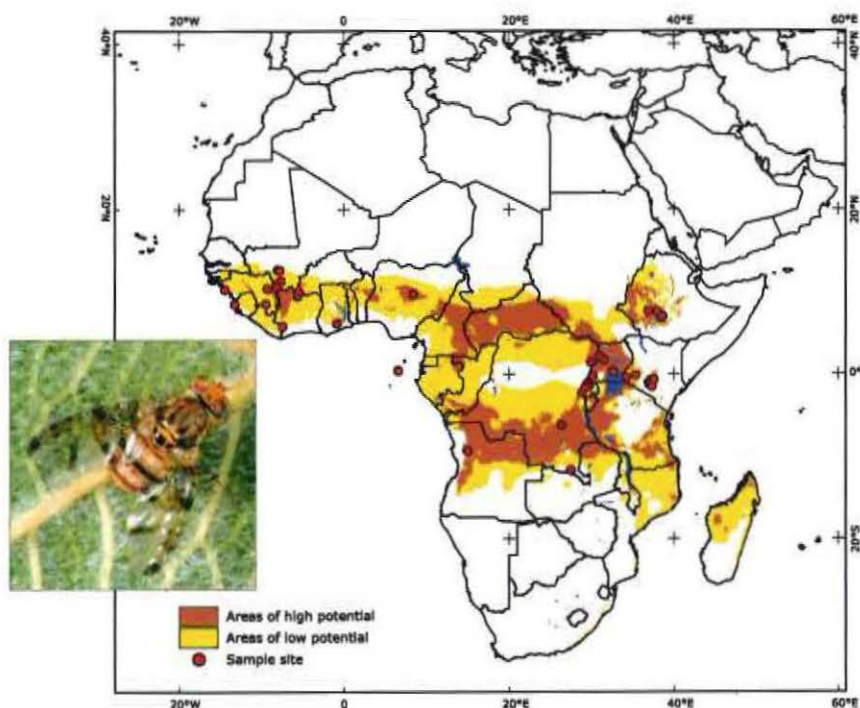


Figure 4. Distribution and potential *Ceratitis fasciventris* zones in Africa.
Inset: Adult *Ceratitis fasciventris*

***Ceratitis anonae* Graham (Diptera: Tephritidae)**

Distribution: *Ceratitis anonae* (Figure 5, inset) is found in Cameroon, Central African Republic, Côte d'Ivoire, Democratic Republic of Congo, Gabon, Ghana, Guinea, Kenya, Sao Tome & Principe, Togo, Tanzania and Uganda (White and Elson-Harris, 1992; Copeland et al., 2006) (Figure 5).

Host plants: Attacks nearly 50 fruit species. In most of the countries where it is found, it has been reared from guava (*Psidium guajava*). It is a common pest on mango (*Mangifera indica*) in West Africa (White and Elson-Harris, 1992; De Meyer et al., 2002; Copeland et al., 2006; M. Billah, unpublished data) (Annex 1).

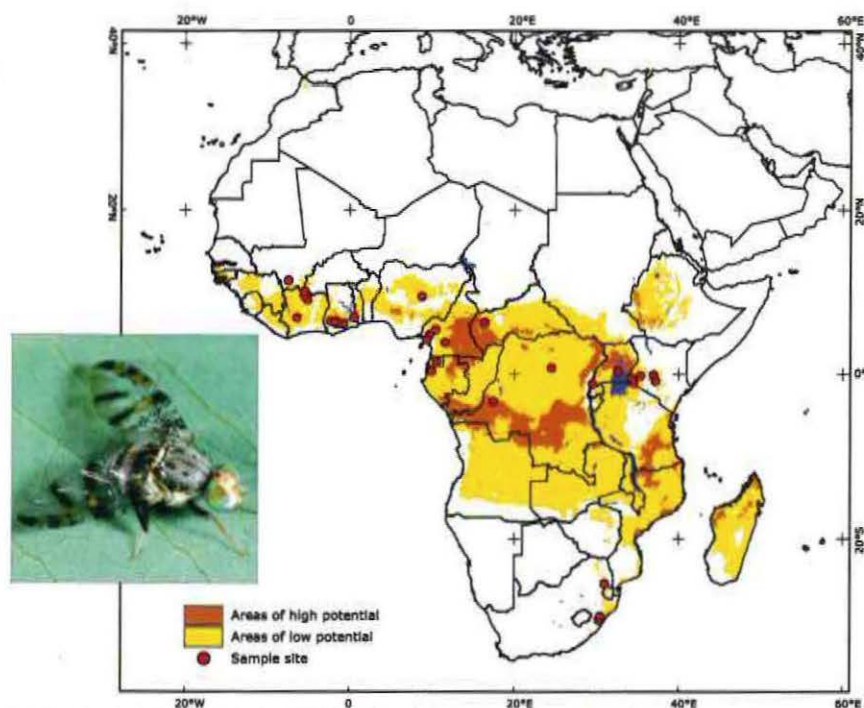


Figure 5. Distribution and potential *Ceratitis anonae* zones in Africa.
Inset: Adult *Ceratitis anonae*

***Ceratitis capitata* (Wiedemann) (Diptera: Tephritidae)**

Common name: Mediterranean fruit fly

Distribution: *Ceratitis capitata* (Figure 6, inset) is the most widely distributed pest fruit fly species. In Africa, it is recorded from Algeria, Angola, Benin, Burkina Faso, Burundi, Cameroon, Congo, Democratic Republic of Congo, Egypt, Ethiopia, Gabon, Ghana, Guinea, Côte d'Ivoire, Kenya, Liberia, Libya, Malawi, Morocco, Mozambique, Niger, Nigeria, Senegal, South Africa, Sudan, Tanzania, Togo, Tunisia, Uganda and Zimbabwe (White and Elson-Harris, 1992) (Figure 6). For global distribution and predictions see De Meyer et al. (2008).

Outside its aboriginal home of Africa, it has also been reported in Australia, several European countries, Central, North and South America, the Middle East, Oriental Asia, the Atlantic Islands, Indian Ocean Islands, Pacific Ocean Islands, the West Indies and nearby islands (White and Elson-Harris, 1992).

Host plants: Extremely polyphagous and reared from over 300 commercial and wild host plants (White and Elson-Harris, 1992; De Meyer et al., 2002) (Annex 1).

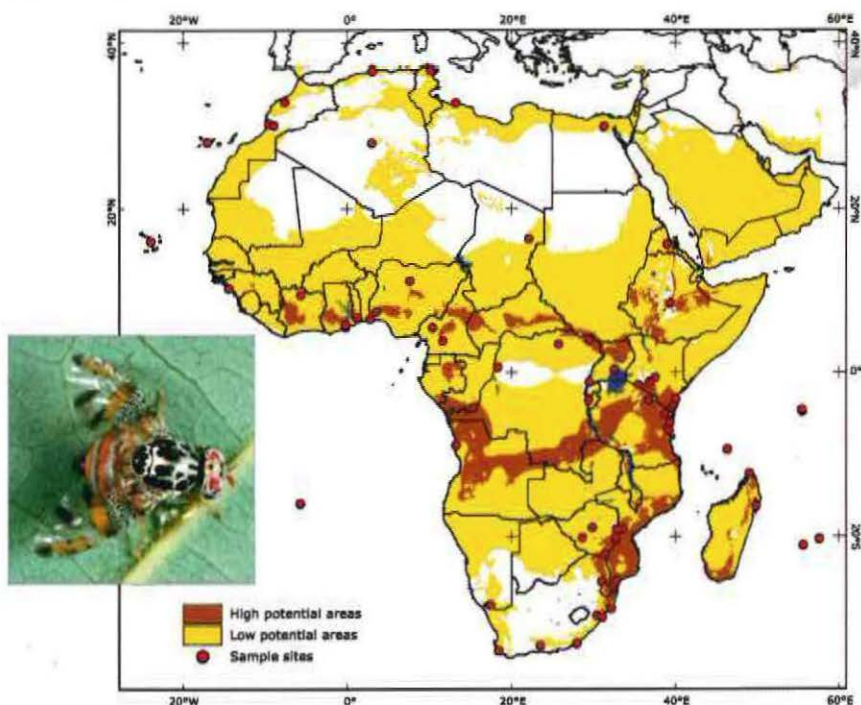


Figure 6. Distribution and potential *Ceratitis capitata* zones in Africa.
Inset: Adult *Ceratitis capitata*

***Ceratitis quinaria* (Bezzi) (Diptera: Tephritidae)**

Common name: Five-spotted fruit fly

Distribution: *Ceratitis quinaria* is recorded from Benin, Botswana, Burkina Faso, Guinea, Ghana, Ivory Coast, Namibia, Malawi, Mali, Senegal, South Africa, Sudan, Togo and Zimbabwe (White and Elson-Harris, 1992; De Meyer *et al.*, 2002; Vayssières *et al.*, 2005; Vayssières *et al.*, unpublished data) (Figure 7).

Host plants: Principally a pest of mango in West Africa (Vayssières *et al.*, 2005). Elsewhere it has been recorded from apricot (*Prunus armeniaca*), citrus (*Citrus* spp.), guava (*Psidium guajava*) and peach (*Prunus persica*) (White and Elson-Harris, 1992; De Meyer *et al.*, 2002) (Annex 1).

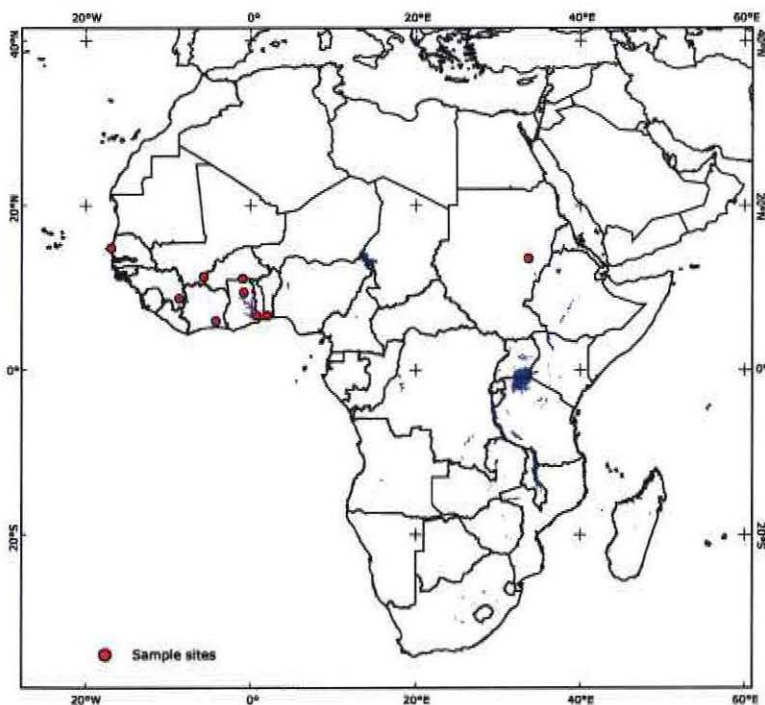


Figure 7. Distribution of *Ceratitis quinaria* in Africa.
See Chapter 7 for photo of adult *Ceratitis quinaria*

***Ceratitis rubivora* (Coquillett) (Diptera: Tephritidae)**

Common name: *Blackberry fruit fly*

Distribution: *Ceratitis rubivora* (Figure 8, inset) is recorded from Cameroon, Kenya, Malawi, Tanzania, South Africa, Uganda and Zimbabwe (White and Elson-Harris, 1992) (Figure 8).

Host plants: Principally a pest of berry of the genus *Rubus*, occurring on blackberry (*R. fruticosus*), loganberry (*R. loganobaccus*) and raspberry (*R. idaeus*) (White and Elson-Harris, 1992; De Meyer et al., 2002) (Annex 1).

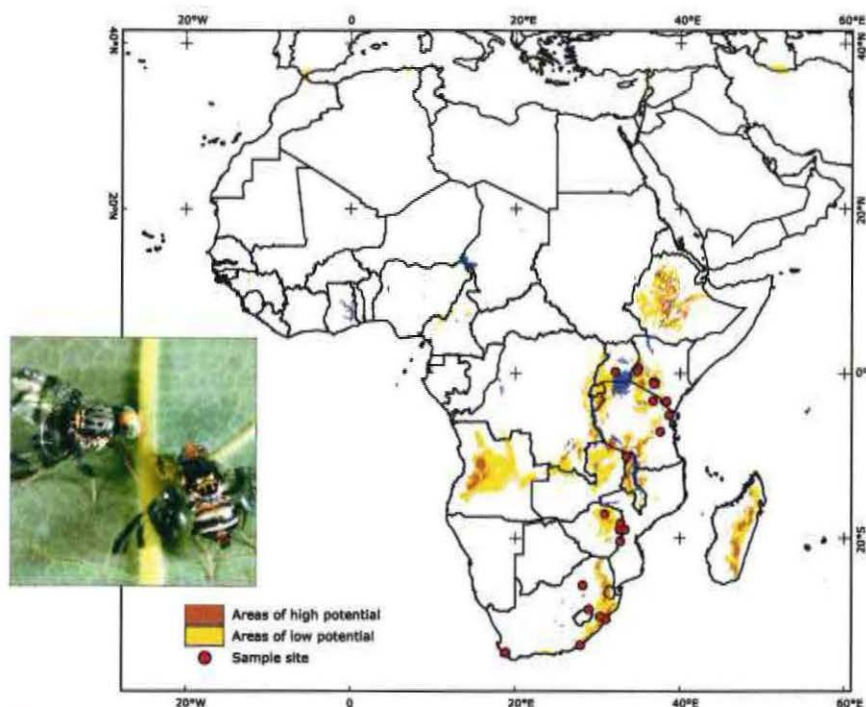


Figure 8. Distribution and potential *Ceratitis rubivora* zones in Africa.
Inset: Adult *Ceratitis rubivora*

***Bactrocera invadens* Drew, Tsuruta & White (Diptera: Tephritidae)**

Common name: African Invader Fly

Distribution: *Bactrocera invadens* (Figure 9, inset) is an invasive fruit fly species of Asian origin (Drew et al., 2005). In Africa it has been recorded from Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Republic of the Congo, Democratic Republic of the Congo, Ethiopia, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea Bissau, Ivory Coast, Kenya, Mali, Mozambique, Namibia, Niger, Nigeria, Senegal, Sierra Leone, Sudan, Tanzania, Togo, Uganda and Zambia (Drew et al., 2005; De Meyer et al., 2009; S. Ekesi et al., unpublished data; Goergen et al., R. Hanna et al., unpublished data; <http://www.africamuseum.be/fruitfly/AfroAsia.htm>) (Figure 9). It was discovered in Sri Lanka soon after it was reported from Africa (Drew et al., 2005). For global distribution and predictions see De Meyer et al. (2009).

Host plants: It has been recorded from over 40 plant species (Vayssières, 2005; Ekesi et al., 2006; Mwatawala et al., 2006; Rwomushana et al., 2008; Goergen et al., unpublished). It damages mango (*Mangifera indica*), sweet orange (*Citrus sinensis*), banana (*Musa* spp.), papaya (*Carica papaya*) and guava (*Psidium guajava*) but mango appears to be the most preferred host plant (Annex 1).

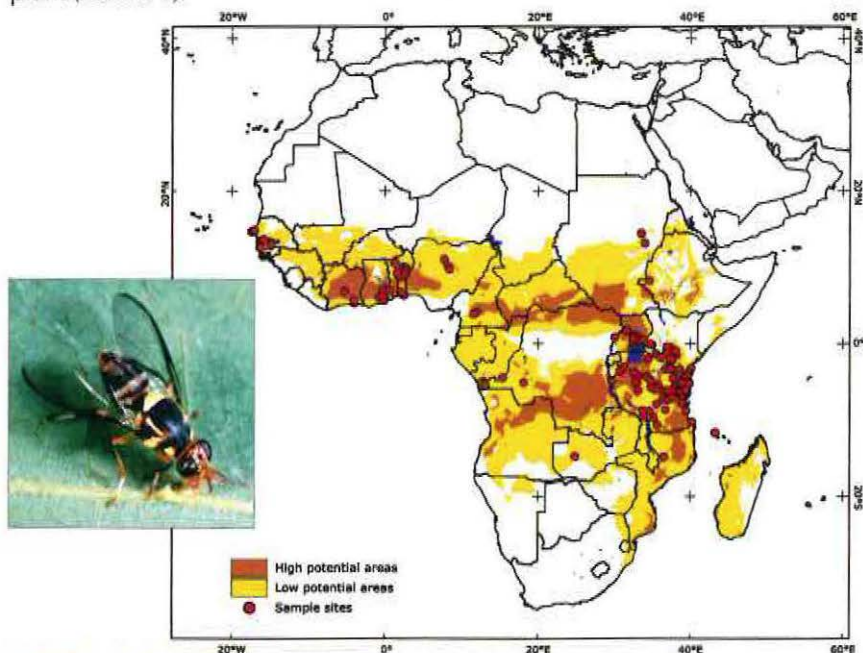


Figure 9. Distribution and potential *Bactrocera invadens* zones in Africa.
Inset: Adult *Bactrocera invadens*

***Bactrocera latifrons* (Hendel) (Diptera: Tephritidae)**

Common name: *Solanum* fruit fly

Distribution: *Bactrocera latifrons* (Figure 10, inset) is an invasive pest species in Africa and is recorded from Kenya and Tanzania (Mwatawala et al., 2007; S. Ekesi, unpublished data; <http://www.africamuseum.be/fruitfly/AfroAsia.htm>) (Figure 10).

It is native to Oriental Asia and has also been reported from Hawaii (White and Elson-Harris, 1992).

Host plants: It is a pest of solanaceous crops. In Africa it has been reared from the African egg plant *Solanum aethiopicum*, *S. macrocarpon* and *S. anguivi*, black nightshade *S. nigrum* and *S. scabrum*, egg plant *S. melongena*, Sodom apple *S. sodomum*, *S. incanum*, terongan *S. torvum* and tomato *Lycopersicon esculentum* (Mwatawala et al. 2009; S. Ekesi, unpublished data) (Annex 1).

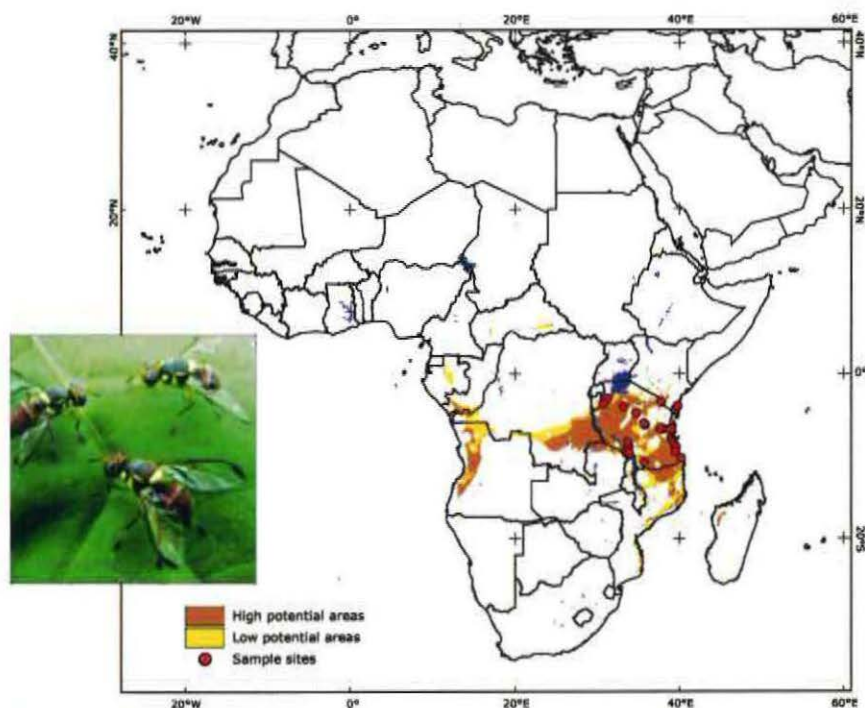


Figure 10. Distribution and potential *Bactrocera latifrons* zones in Africa.
Inset: Adult *Bactrocera latifrons*

***Bactrocera cucurbitae* (Coquillet) (Diptera: Tephritidae)**

Common name: Melon fly

Distribution: *Bactrocera cucurbitae* (Figure 11, inset) is an invasive pest species in Africa and is recorded from Benin, Burkina Faso, Cameroon, Democratic Republic of Congo, Gambia, Guinea, Ivory Coast, Kenya, Mali, Niger, Nigeria, Senegal, Seychelles, Sudan, Tanzania, Togo and Uganda (White and Elson-Harris, 1992; R. Hanna *et al.*, unpublished data; M.K. Billah, unpublished data; <http://www.africamuseum.be/fruitfly/AfroAsia.htm>) (Figure 11).

It is native to Oriental Asia and has also been reported from Hawaii, Iran, the Indian Ocean Islands of Mauritius and Réunion, the New Guinea area and Seychelles (White and Elson-Harris, 1992; <http://www.africamuseum.be/fruitfly/AfroAsia.htm>).

Host plants: This pest has been reared from over 125 fruit species. Plants in the family Cucurbitaceae are, however, the usual hosts (Annex 1).

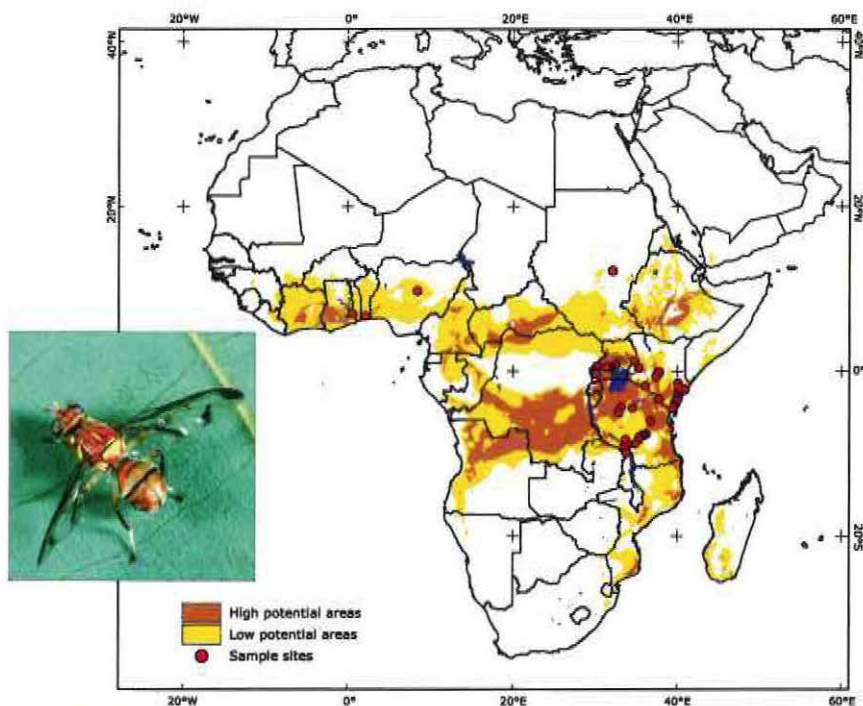


Figure 11. Distribution and potential *Bactrocera cucurbitae* zones in Africa.
Inset: Adult *Bactrocera cucurbitae*

***Bactrocera zonata* (Saunders) (Diptera: Tephritidae)**

Common name: Peach fruit fly

Distribution: *Bactrocera zonata* (Figure 12, inset) is native to South and Southeast Asia. In Africa it occurs in Egypt and the Indian Ocean islands of Mauritius and Réunion (Figure 12) (<http://www.africamuseum.be/fruitfly/AfroAsia.htm>). It has also been reported from Israel, Saudi Arabia, Oman and Yemen.

Host plants: Attacks over 20 host plants (White and Elson-Harris, 1992). It is a major pest of mango (*Mangifera indica*) in Egypt and Mauritius (Annex 1).

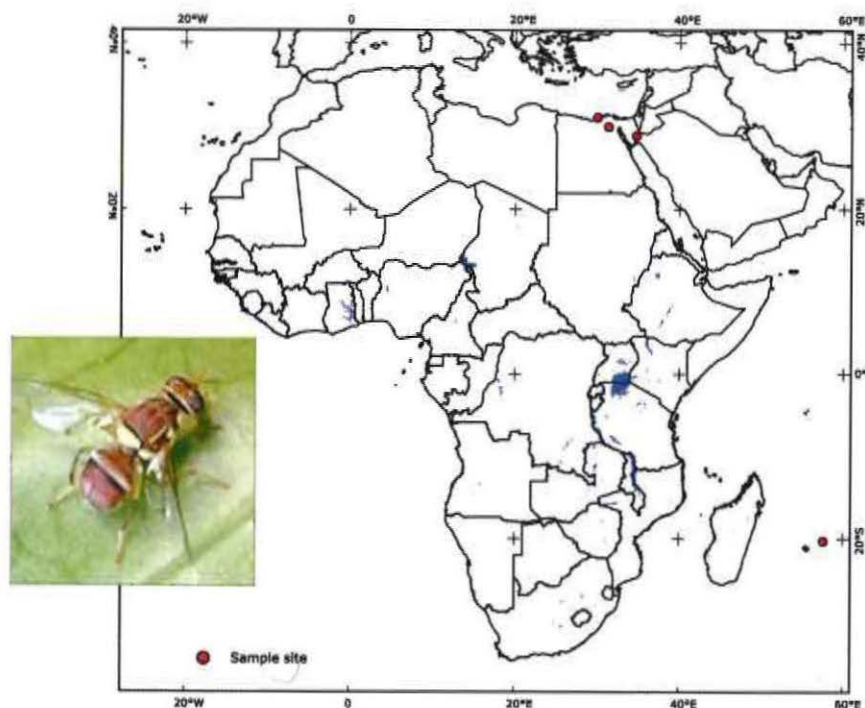


Figure 12. Distribution of *Bactrocera zonata* in Africa.
Inset: Adult *Bactrocera zonata*

***Dacus bivittatus* (Bigot) (Diptera: Tephritidae)**

Common name: Pumpkin fly

Distribution: *Dacus bivittatus* (Figure 13, inset) is known from Angola, Cameroon, Democratic Republic of Congo, Ghana, Kenya, Malawi, Mozambique, Nigeria, Senegal, Sierra Leone, South Africa, Tanzania, Uganda and Zimbabwe (White and Elson-Harris, 1992) (Figure 13).

Host plants: Mainly attacks cucurbits and has been reared from cucumber (*Cucumis sativus*), cantaloupe (*Cucumis melo*), watermelon (*Citrullus lanatus*), white egusi (*Cucumeropsis mannii*), African horned cucumber (*Cucumis metuliferus*), bitter melon (*Momordica charantia*), chayote (*Sechium edule*), luffa (*Luffa aegyptiaca*), oysternut (*Telfairea pedata*), pumpkin (*Cucubita pepo*) and white flower gourd (*Lagenaris siceraria*). A few other non-cucurbit hosts have also been recorded (White and Elson-Harris, 1992) (Annex 1).

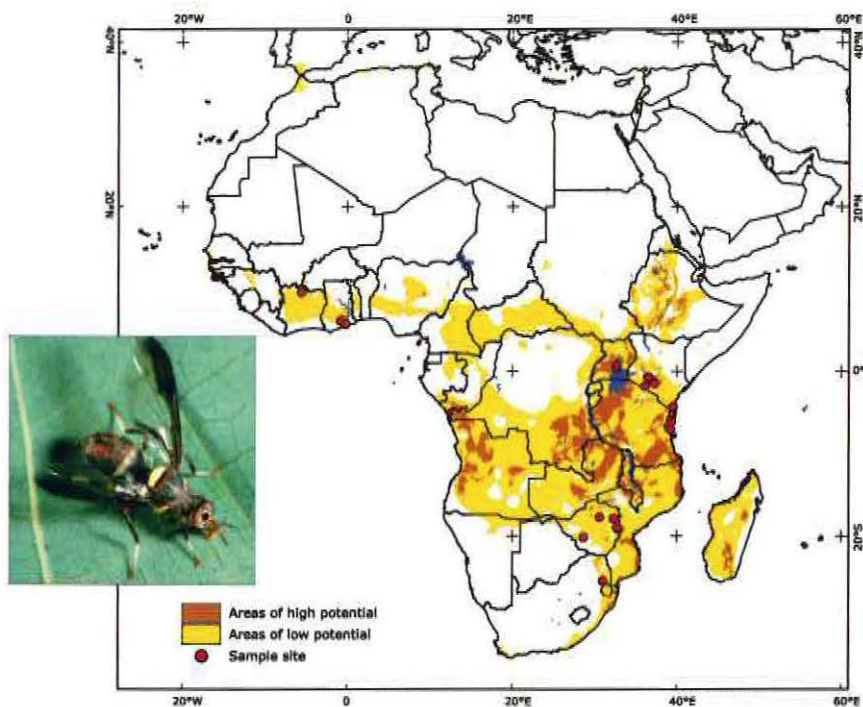


Figure 13. Distribution and potential *Dacus bivittatus* zones in Africa.
Inset: Adult *Dacus bivittatus*

***Dacus ciliatus* Loew (Diptera: Tephritidae)**

Common name: Lesser pumpkin fly

Distribution: *Dacus ciliatus* (Figure 14, inset) is widely distributed in Africa occurring in Angola, Botswana, Cameroon, Chad, Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Guinea, Kenya, Lesotho, Malawi, Mozambique, Nigeria, Senegal, Sierra Leone, Somalia, South Africa, Sudan, Tanzania, Uganda, Zambia and Zimbabwe (White and Elson-Harris, 1992) (Figure 14).

Host plants: A pest of cucurbit crops recorded from nearly 20 commercial host plants (White and Elson Harris, 1992) (Annex 1). A few non-cucurbits including beans (*Phaseolus* spp.), cotton (*Gossypium* sp.), okra (*Abelmoschus esculentus*) and tomato (*Lycopersicum esculentum*) are also hosts. Several wild Cucurbitaceae are also host to *D. ciliatus* (White and Elson-Harris) (Annex 1).

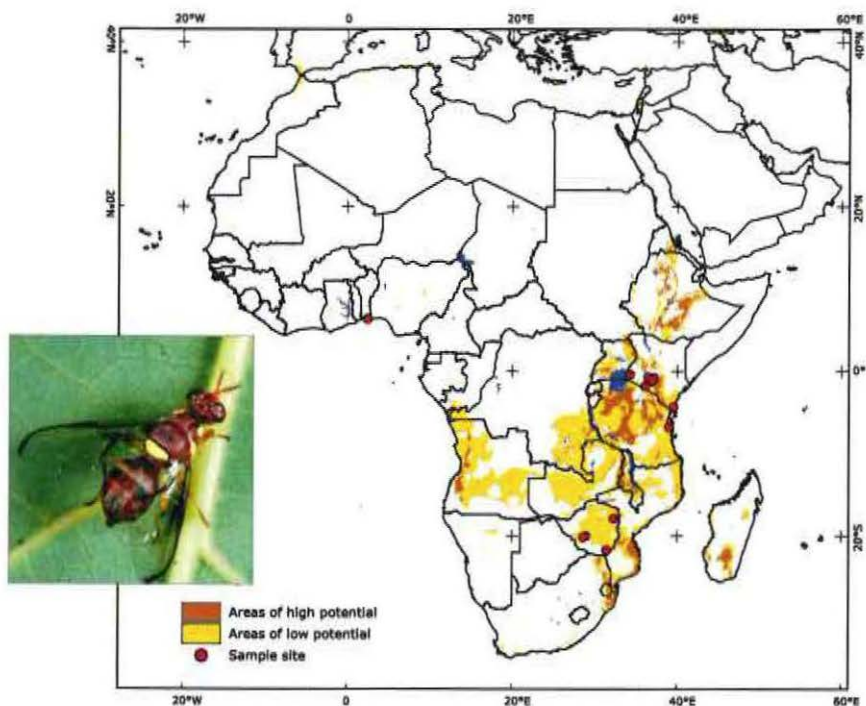


Figure 14. Distribution and potential *Dacus ciliatus* zones in Africa.
Inset: Adult *Dacus ciliatus*

***Dacus frontalis* Becker (Diptera: Tephritidae)**

Distribution: *Dacus frontalis* (Figure 15, inset) occurs in the Cape Verde Islands, Egypt, Kenya, Lesotho, South Africa, Sudan, Tanzania and Zimbabwe (White and Elson-Harris, 1992) (Figure 15). Outside Africa, it occurs in Saudi Arabia and Yemen Arab Republic.

Host plants: It is a pest of cucurbits, attacking cucumber (*Cucumis sativus*), pumpkin (*Cucurbita pepo*), sweet melon (*Cucumis melo*) and watermelon (*Citrullus lanatus*). Colocynth (*Citrullus colocynthis*) is an important alternative host. It also attacks a species of gourd (*Coccinia* sp.) and a squash (*Cucurbita* sp.) (White and Elson-Harris, 1992) (Annex 1).

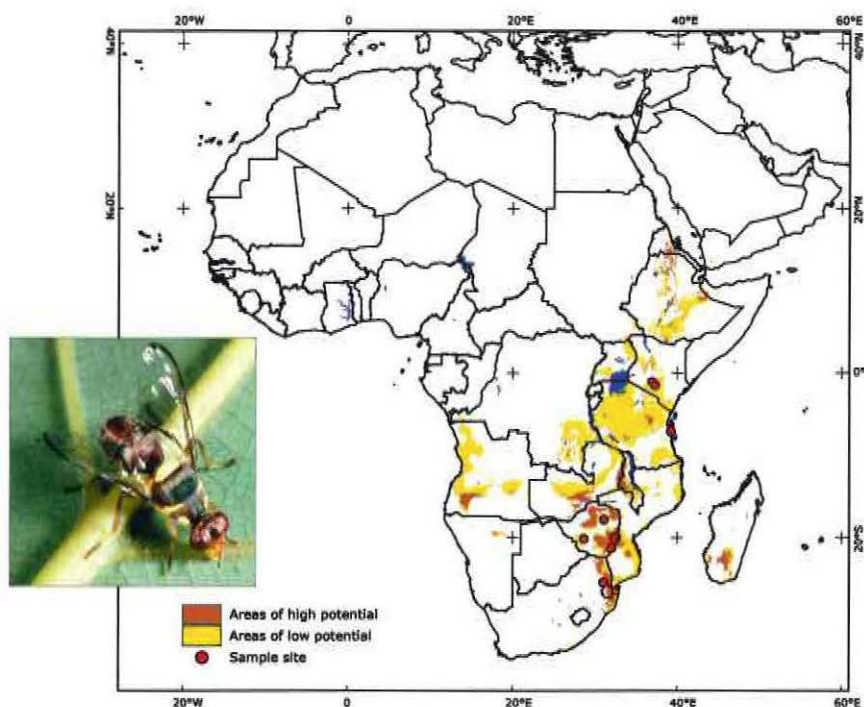


Figure 15. Distribution and potential *Dacus frontalis* zones in Africa.
Inset: Adult *Dacus frontalis*

***Dacus lounsburyi* Coquillett (Diptera: Tephritidae)**

Distribution: *Dacus lounsburyi* (Figure 16, inset) is reported from Angola, Kenya, South Africa and Zimbabwe (White and Elson-Harris, 1992) (Figure 16).

Host plants: It is a rare species that attacks mainly cucurbits including pumpkin (*Cucurbita pepo*), sweet melon (*Cucumis melo*) and watermelon (*Citrullus lanatus*) (White and Elson-Harris, 1992) (Annex 1).

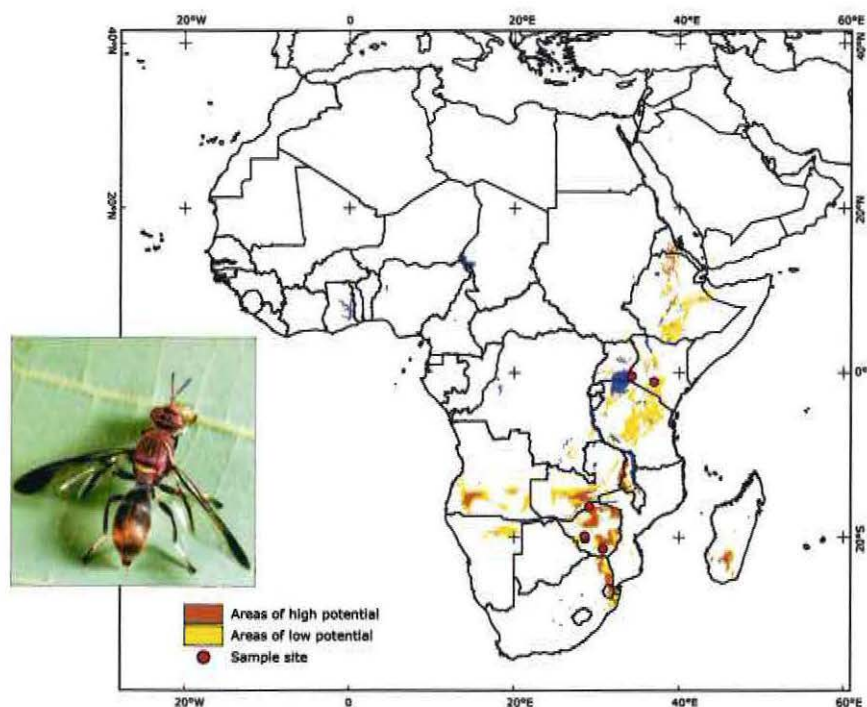


Figure 16. Distribution and potential *Dacus lounsburyi* zones in Africa.
Inset: Adult *Dacus lounsburyi*

***Dacus punctatifrons* Karsch (Diptera: Tephritidae)**

Distribution: *Dacus punctatifrons* (Figure 17, inset) occurs in Angola, Cameroon, Ghana, Nigeria, Kenya, Sierra Leone, South Africa, Tanzania, Uganda, Zambia and Zimbabwe (White and Elson-Harris, 1992) (Figure 17). It also occurs on the Indian Ocean island of Mauritius and in Yemen.

Host plants: It has been reared from pumpkin (*Cucurbita pepo*), cucumber (*Cucumis sativus*), bitter melon (*Momordica charantia*), chayote (*Sechium edule*) and wild watermelon (*Passiflora foetida*) and a few wild Cucubitaceae (White and Elson-Harris, 1992) (Annex 1).

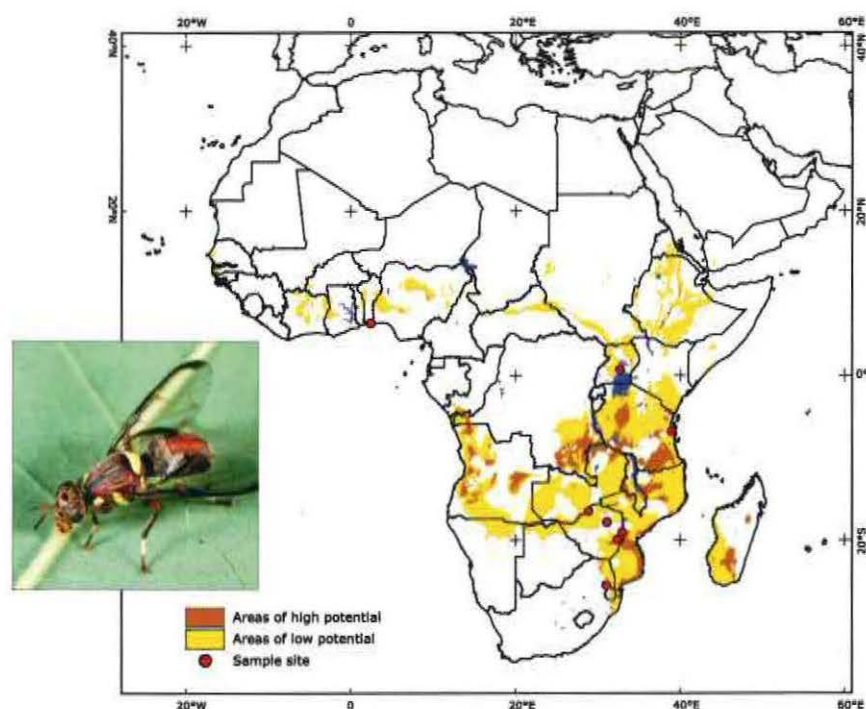


Figure 17. Distribution and potential *Dacus punctatifrons* zones in Africa. Inset: Adult *Dacus punctatifrons*

***Dacus vertebratus* Bezzi (Diptera: Tephritidae)**

Common name: Jointed pumpkin fly

Distribution: This pest (**Figure 18, inset**) is found in Angola, the Gambia, Ghana, Kenya, Nigeria, Senegal, South Africa, Tanzania, Zambia and Zimbabwe (White and Elson-Harris, 1992) (**Figure 18**). It also occurs in the Indian Ocean island of Madagascar, and in Saudi Arabia and Yemen.

Host plants: A pest of cucurbits with strong preference for watermelon (*Citrullus lanatus*). It also attacks cantaloupe (*Cucumis melo*), cucumber (*Cucumis sativus*), squash (*Cucurbita maxima*) and white egusi (*Cucumeropsis mannii*) (**Annex 1**). Several other wild Cucurbitaceae are also attacked (White and Elson-Harris, 1992).

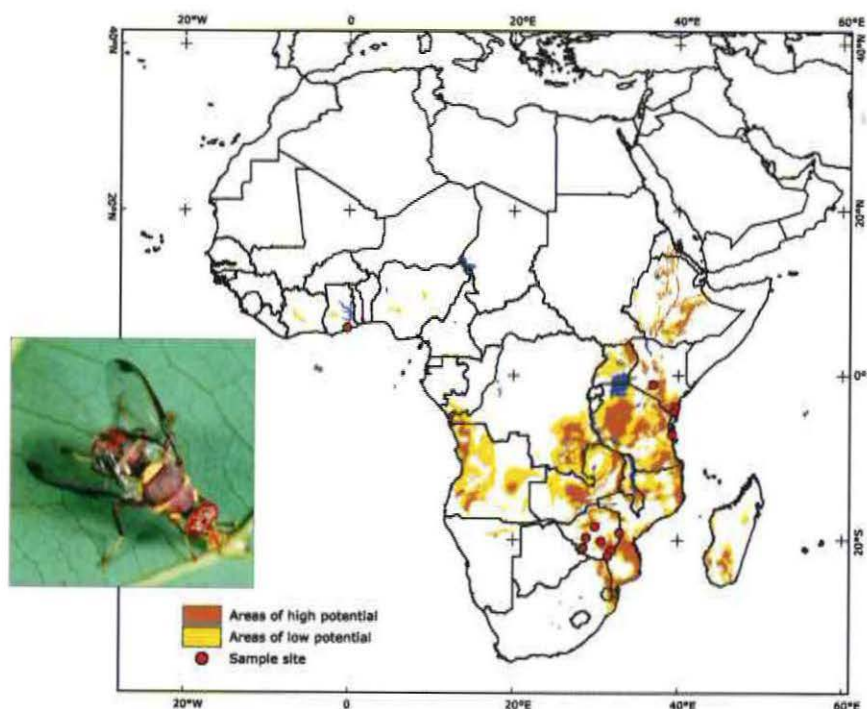


Figure 18. Distribution and potential *Dacus vertebratus* zones in Africa.
Inset: Adult *Dacus vertebratus*

Species distribution maps

The distribution maps for all the fruit fly species were generated using geographic information system (GIS) software. Geo-positioned data on species occurrence from our own sampling data and from the literature (indicated on map as sample sites) were used to characterise the environment where each fruit fly species was found. GIS was then used to interpolate beyond the sampling sites to locate all areas that share similar environments (potential zones). Although White and Elson-Harris (1992) listed different countries for each fruit fly species, countries where specific coordinates of sample sites could not be obtained were not included for predictions. The potential zones (high and low) were generated using the following ecological parameters: precipitation (annual) and temperature (annual, minimum coldest month and maximum warmest month). Due to paucity of geo-positioned data, no predictions were made for *C. quinaria* and *B. zonata*.

CHAPTER 2

Fruit Fly Monitoring— Purpose, Tools and Methodology

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Purpose of monitoring

Fruit fly monitoring helps to (i) identify fruit fly pests in an area, (ii) determine distribution of pest species, (iii) identify local hot spots with high populations of the pest, (iv) track changes in population levels, (v) determine efficacy of control measures, and (vi) facilitate early detection of new fruit fly pests in a particular area.

Trapping tools

Tools used in fruit fly monitoring consist of attractant-based trap, and host fruit surveys. (Refer to chapter 5 for host fruit surveys and processing.)

Attractants

The two main types of attractants used in fruit fly monitoring include: (1) male lures and (2) food baits (Cunningham, 1989; Heath *et al.*, 1997; Lux *et al.*, 2003). The major fruit fly species of economic importance and their attractants are presented in **Table 2.1**.

Male lures

Male lures are highly species-specific and are known to have a high efficacy in attracting flies from long distances (Cunningham, 1989; Economopoulos and Haniotakis, 1994; White and Elson-Harris, 1994). Male lures are mostly parapheromones or in the case of the olive fruit fly, *Bactrocera oleae*, are the female sex pheromones. Parapheromones are chemicals that are not naturally used in intraspecific communication but which do elicit responses similar to true pheromones (Cunningham, 1989). Parapheromones are available in both liquid form and as polymeric plugs in the form of a controlled-release formulation. Male lures in liquid form last between 2–4 weeks in the field, while polymeric plugs can last for up to 6 weeks. Minimum intervals between traps baited with parapheromones should be 50–100 m.

Table 2.1. Major fruit fly species of economic importance in Africa and their attractants

Species	Male attractant	Male and female attractant
<i>Bactrocera invadens</i> (Drew, Tsuruta & White)	Methyl eugenol (ME)	Biolure 3-component (Biolure 3C), Protein bait
<i>Bactrocera zonata</i> (Saunders)	ME	Biolure 3C, Protein bait
<i>Bactrocera cucurbitae</i> (Coquillett)	Cuelure (CUE)	Biolure 3C, Protein bait
<i>Bactrocera latifrons</i> (Hendel)	Alpha-ionol and Cade oil	Protein bait
<i>Bactrocera oleae</i> (Gmelin)	Spiroketal	Ammonium bicarbonate, Protein bait
<i>Ceratitis capitata</i> (Wiedemann)	Capilure, Trimedlure, Terpinyl acetate	Ceratitislure, Questlure, Biolure 3C, Protein bait
<i>Ceratitis cosyra</i> (Walker)	Ceratitislure, Terpinyl acetate	Biolure 3C, Questlure, Protein bait
<i>Ceratitis rosa</i> Karsch	Capilure, Trimedlure, Terpinyl acetate	Ceratitislure, Questlure, Biolure 3C, Protein bait
<i>Ceratitis fasciventris</i> (Bezzi)	Terpinyl acetate	Biolure 3C, Protein bait
<i>Ceratitis anonae</i> Graham		Protein bait
<i>Ceratitis rubivora</i> (Coquillett)	Trimedlure	Biolure 3C, Protein bait
<i>Ceratitis quinaria</i>	Terpinyl acetate	Protein bait
<i>Dacus ciliatus</i> Loew		Protein bait, Biolure 3C
<i>Dacus bivittatus</i> (Bigot)	CUE	Biolure 3C, Protein bait
<i>Dacus punctatifrons</i> Karsch	CUE	Protein bait
<i>Dacus frontalis</i> Becker	CUE	Protein bait
<i>Dacus lounsburyi</i> Coquillett		Protein bait
<i>Dacus vertebratus</i> Bezzi	Vertlure	Protein bait

Methyl eugenol (ME) (Plates 2 and 3): Methyl eugenol attracts male *Bactrocera* species (e.g. *B. invadens*, *B. zonata* and *B. dorsalis*). It also attracts a few *Dacus* species. ME can be chemically described as benzene, 1,2-dimethoxy-4-(2-propenyl). Methyl eugenol is also a naturally occurring compound reported from 10 different plant families.

Cuelure (CUE) (Plate 4): Cuelure attracts males of *Bactrocera* and *Dacus* species (e.g. *B. cucurbitae*, *D. bivittatus*, *D. punctatifrons* and *D. frontalis*).



Plate 2. Liquid methyl eugenol



Plate 3. A sachet of methyl eugenol polymeric plugs

Its chemical description is 4-(*p*-hydroxyphenyl)-2-butanone acetate. CUE does not occur in nature but the most closely related analogue is raspberry ketone, which occurs in plants.

Alpha-ionol and cade oil: A combination of alpha-ionol (commonly known as Latilure) and cade oil attracts males of the solanaceous fruit fly, *Bactrocera latifrons* (Flath et al., 1994; McQuate et al., 2001, McQuate et al., 2004). Alpha-ionol [4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-ol] is a colourless liquid, insoluble in water, soluble in alcohol. Cade oil is a product of the distillation of the wood juniper, *Juniperus oxycedrus* L., twigs. The two compounds must be used separately (on separate cotton wicks) in the same trap. Lure quantities required are 2.0 ml of alpha-ionol and 1.0 ml of cade oil.

Spiroketal: The female sex pheromone referred to as Spiroketal attracts males of the olive fruit fly, *Bactrocera oleae*. The description of Spiroketal is 1, 7-dioxaspiro-[5,5] undecane (IAEA, 2003). Spiroketal can be combined with a protein bait or ammonium bicarbonate for monitoring (IAEA, 2003; Yokoyama et al., 2006).

Trimedlure (TML) (Plate 5): Trimedlure, Ceralure or Capilure (Quest Developments®) attracts males of some *Ceratitis* species (e.g. *C. capitata* and *C. rosa*). Its chemical description is tert-butyl 4 (and 5)-chloro-2-methylcyclohexane-1-carboxylate. It is a synthetic compound and is not found in nature.

Terpinyl acetate: Terpinyl acetate is a natural ester compound. It is moderately attractive to males of many *Ceratitis* species including *C. cosyra*, *C. rosa* and *C. capitata*.



Plate 4. Sachets of Cuelure polymeric plugs



Plate 5. Sachets of Trimedlure polymeric plugs (left) and sachet (top) and capsule (down) of Capilure (right)

Ceratitislure (Plate 6): Ceratitislure (Quest Developments®) is commercially available as a blue coloured capsule with an attractant impregnated in a sponge. Ceratitislure is highly attractive to males of *C. cosyra* (Ware, 2002).



Plate 6. A sachet of Ceratitislure (top) and capsule of Ceratitislure (down)

Vertlure: Vertlure attracts only males of *D. vertebratus*. Its chemical description is methyl-4-hydroxybenzoate.

Food baits

Food baits attract both male and female fruit flies. They are not species-specific and are known to have a lower efficiency compared to male lures (White and Elson-Harris, 1994). Food baits can also attract a number of non-target insects, including beneficial ones. Food baits are available in

both liquid and dry synthetic forms. Ammonia is the principal attractant emanating from food baits. There are a variety of commercially available food baits. These include liquid protein hydrolysates, yeast products, ammonium salts and the three-component lure (consisting of putrescine, ammonium acetate and trimethylamine) (Mazor *et al.*, 1987; Heath *et al.*, 1997; Lux *et al.*, 2003; IAEA, 2003). Field longevity of liquid protein hydrolysates, yeast products and ammonium salts is usually between 1–2 weeks while the three-component lure and Questlure (Questlure Developments (R), South Africa) capsule can last between 4–6 weeks. Minimum distance interval between food-baited traps should range from 10–30 m.

Protein hydrolysates: Some commercially available protein hydrolysates include Nu-Lure (Miller Chemical & Fertilizer Corporation, Hanover, USA) (**Plate 7**), Buminal (Bayer SA, Puteaux, France), Corn Steepwater (Corn Products, Summit Argo, USA), Hym-Lure RTU (Savoury Food Industries [PTY] Limited, South Africa), Loklure (Tsunami Crop Care [Pty] Limited, South Africa), Mazoferm (Corn Products International, Kenya), Pinnacle Protein Fruit Fly Bait (Mauri Yeast Products, Brisbane, Australia) and Solbait (US Department of Agriculture, Weslaco, USA).

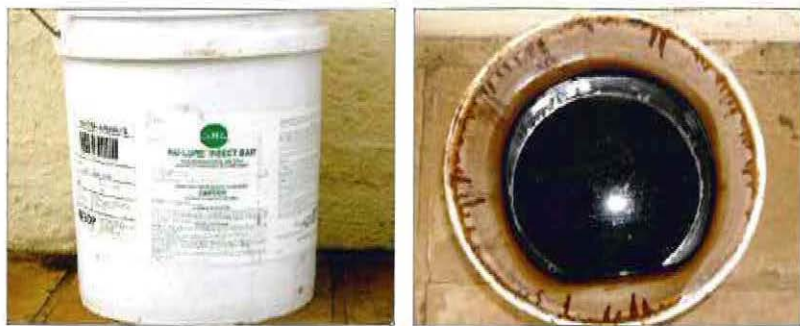


Plate 7. NuLure liquid protein hydrolysate

Yeast products: Torula yeast is an autolysed yeast protein and is available commercially as dry pellets. *icipe* yeast product (**Plate 8**) is a locally made product by the African Fruit Fly Programme (AFFP), of the International Centre of Insect Physiology and Ecology (*icipe*), Nairobi, Kenya.

Ammonium salts: Some ammonium salts such as ammonium carbonate or ammonium acetate can be used in fruit fly monitoring.

Biolure—the 3-component lure: Biolure 3C (**Plate 9**) is a commercially available dry attractant and consists of three components: putrescine, ammonium acetate and trimethylamine. These components are available as



Plate 8. AFFP yeast product



Plate 9. Biolure—the 3-component lure

membrane-based dispensers. The 3-component lure has been found to be a highly attractive female lure for *C. capitata*.

Questlure (Plate 10): Questlure (Quest Developments®) is commercially available as a green coloured capsule with attractant impregnated in a sponge. The attractant is widely used in the South African citrus industry to monitor *C. capitata* and *C. rosa* population (Grout and Ware, 2005).



Plate 10. A sachet of Questlure (top) and capsule (down)

Traps

Traps used for fruit fly monitoring are dependent upon the nature of the attractant (IAEA, 2003). These include:

Lynfield trap: The Lynfield trap (**Plate 11**) is a simple 'bucket' type of trap that is composed of a cylindrical plastic container with four equidistant holes at the upper third, a lid and a wire hanger with bait basket. The Lynfield trap can be locally made. The Morocco trap is a version of Lynfield trap. Lynfield traps can be used either with parapheromones or with food baits



Plate 11. Locally made Lynfield trap (left) and Morocco trap (right)

such as protein hydrolysates, yeast and ammonium salts. When used with parapheromones, small holes should be pierced at the bottom of the trap to allow for drainage of water. The parapheromone is usually placed in the bait basket, which is suspended at the top of the trap. When a polymeric plug dispenser is used, an insecticidal strip such as DDVP (2, 2-dichlorovinyl dimethyl phosphate) is placed at the bottom of the trap to kill any attracted flies. When used with liquid food bait, the baits are poured into the bottom of the trap.

Jackson trap: The Jackson trap (**Plate 12**) is a delta-shaped trap made of waxed cardboard material. The trap is mainly used with parapheromone lures to capture male fruit flies. The lure is suspended at the top of the trap, usually in a bait basket. A sticky insert is placed at the bottom of the trap, which captures flies once they land on the surface.

Steiner trap: The Steiner trap (**Plate 13**) is a horizontal, clear cylinder with a large opening at each end. This trap uses the male-specific parapheromone lures. The lure is suspended in the middle of the trap. An insecticide placed on the floor of the trap has to be used to prevent flies escaping and predation



Plate 12. The Jackson trap



Plate 13. The Steiner trap

of captured flies. A wire hanger is placed on top of the trap body and is used to hang the trap from the tree branches.

Sensus trap: The Sensus® trap (**Plate 14**) is a bucket type trap with transparent plastic bottom and a blue overhanging lid with 12 square openings (0.7 mm x 0.7 mm) just underneath. The trap uses male-specific parapheromones or food attractants (e.g. Questlure). An insecticide is placed in the lid underneath the attractant capsule to kill attracted flies.



Plate 14. The Sensus® trap

McPhail trap: The McPhail trap (**Plate 15**) is a two-piece transparent plastic pear shaped invaginated container. The upper part of the trap and the base can be separated allowing the trap to be serviced and re-baited. This trap can be used with liquid food bait. The liquid food bait is poured at the bottom of the trap. An entrance hole at the bottom of the trap allows access to the trap by the flies. The upper part of the trap is transparent and contrasts with the yellow base, which enhances the trap's ability to attract fruit flies.



Plate 15. The McPhail trap

Tephri trap: The Tephri trap (**Plate 16**) is a modified McPhail trap with a yellow base and a clear top, which can be separated to facilitate servicing. The trap has entrance holes around the top of the periphery of the yellow base and an invaginated opening in the bottom. The Chempac bucket trap (Chempac (Pty) Ltd) is a version of the Tephri trap available in South Africa. Inside the clear top is a platform, which houses the attractants. The trap can be used with liquid protein bait, the 3-component lure as well as parapheromones. If used as a wet trap and with the side holes blocked, no insecticide is required since the liquid (protein bait or water) serves as the retention system. The liquid is usually poured at the base of the trap. If used as a dry trap and with the side holes, an insecticide must be used to kill attracted flies. The attractant is placed on the platform at the top of the trap and the insecticide at the bottom of the trap.



Plate 16. The Tephri trap (left) and the Chempac Bucket trap (right)

Multilure trap: The Multilure trap (**Plate 17**) is a newer version of the McPhail trap. It consists of a two-piece plastic cylinder shaped invaginated container. The upper and base of the trap can be separated allowing the trap to be serviced and baited. The transparent upper part contrasts with the yellow base, which enhances the trap's ability to attract fruit flies. The trap can be used with the liquid protein bait and Biolure, as well as with parapheromones (as polymeric plugs). The liquid protein bait is placed at the bottom of the trap. When used with Biolure, membrane dispensers of the three components (putrescine, trimethylamine and ammonium acetate) are stuck to the wall of the upper part of the trap with water and Triton serving as the retention medium. When used with parapheromones, the lure can be suspended in the bait basket



Plate 17. The Multilure trap

incorporated at the top of the trap. If used as a dry trap, with either Biolure or male lure polymeric plug, a killing strip such as DDVP (2,2-dichlorovinyl dimethyl phosphate) is placed at the bottom of the trap.

Trapping survey objectives and applications

There are three types of trapping surveys with the following objectives:

1. **Detection surveys** determine if species are present in an area.
2. **Delimiting surveys** determine the boundaries of an area considered to be infested or free from pests, and
3. **Monitoring surveys** are ongoing surveys to verify the characteristics of a pest (IAEA, 2003).

According to IAEA (2003), trapping surveys are applied:

1. In infested areas to determine presence of fruit fly pest species and monitor established populations.
2. In treated areas (e.g. after suppression with bait sprays or in areas treated with entomopathogens) to measure efficacy of control.
3. To determine the presence of species which are under exclusion measures.

Detection surveys

Since majority of fruit flies are quarantine pests, detection surveys are important and must be carried out routinely to prevent entry and establishment of unwanted fruit flies. In these surveys, both parapheromone- and food-based traps are recommended in high risk areas such as points of entry, border areas and in towns while only parapheromones can be used in production areas. The parapheromones used in detection programmes include: (1) methyl eugenol (ME) which attracts *B. invadens*, *B. zonata* and other *Bactrocera* species of quarantine importance and (2) Cuelure, which attracts other *Bactrocera* spp. of quarantine importance not attracted to ME.

It is essential to also use food-baited traps in detection surveys since they attract a broad range of fruit flies and may capture other fruit flies that do not respond to the other two parapheromones described above. Lynfield or McPhail traps baited with liquid protein bait (e.g. Nulure) and multilure traps baited with synthetic food bait (e.g. Biolure), should also be included in detection programmes.

Delimiting surveys

Delimiting surveys are usually carried out over a large area and are particularly sensitive surveys requiring efficient traps and attractants. Para-

pheromone-based traps are therefore recommended. Prior information on the type of male lure that attracts the target insect to be surveyed is important. Once this is known, Lynfield traps baited with appropriate parapheromones are recommended. Lynfield traps can be made locally and are easy to handle and service.

Monitoring surveys

Monitoring surveys in infested areas under no control measures are carried out to determine species presence and monitor established fruit fly populations. Fluctuations in population of fruit fly species can be determined over time. This will help determine appropriate time for control actions in a specific area. For this type of survey, both food-based and parapheromone-based traps are recommended. The food-based trap will help determine the species complex of the area and the parapheromone-based trap will help determine population fluctuations of the target species. The type of trap recommended for both liquid protein bait and parapheromones is the Lynfield trap.

Monitoring surveys carried out in suppression areas aim to determine efficiency of control measures in reducing fruit fly populations within these areas. The attractants and trap type used will be a function of the control measures being evaluated. For areas under protein bait application (either in form of sprays or stations), Lynfield or Jackson traps baited with parapheromones or male lures are recommended. For areas under either sterile male release programme (sterile insect technique) or under male annihilation technique (use of parapheromone and insecticide to reduce male population), McPhail type traps baited with food baits are recommended.

Trapping network

The trapping network adopted in a particular survey depends on the characteristics of an area (IAEA, 2003). In areas of continuous blocks of commercial orchards, the traps are arranged in a grid system. In areas where orchards have a scattered distribution interspersed with settlements and backyard host trees or in marginal areas with wild and commercial hosts, traps are arranged in a system that follows a road network to allow access to the host areas (IAEA, 2003). For early detection, there is no defined layout, except that it has to be at points of entry (e.g. airports), border areas (inland border posts), points of fruit trade (e.g. local markets) and in production areas.

Placement of traps (data sheets)

Public relations

Trappers are frequently in contact with the public and should therefore adopt the following practices:

1. Good public relations, appearance and conduct.
2. Make proper contacts with the homeowner or fruit grower and ask for permission to place the traps. Provide adequate explanations before trap placement.
3. Be considerate of the inhabitants of an area and their property.
4. Display courteous driving habits and gestures.

Trapping site

Before placing traps, label all components of the trap (i.e. base, lid) with the institution name, code with trap ID number and permanently mark as being used for a particular attractant (ME/Cuelure/TML/Nulure/PTA).

The selection of a proper trapping site is critical in any trapping survey. It is important to develop a list of fruit fly host trees for the fruit fly species that needs to be monitored and be familiar with these host trees. Host trees can be either commercial or wild fruit trees. Traps must be placed on host trees or close to host trees. Whenever possible, a fruiting host tree should be chosen for setting traps. If there are no fruiting host trees, traps should be placed on host trees, which contain a food source for the flies such as honeydew. Honeydew is an excretion produced by insects such as aphids, scales, mealybugs and whiteflies. Sooty mould usually grows on leaves covered by honeydew and the leaves eventually turn black. The presence of sooty mould is an indication that the tree contains honeydew. In areas with no hosts, traps should be placed on trees that can offer shelter, protection and food to adult fruit flies.

The trap should be placed about 2–4 m above the ground within the canopy layer, in a semi-shaded spot, preferably in the upwind part of the canopy. Where appropriate, a hook should be used to facilitate placement of traps. The trap should be hung in such a manner that branches and leaves are nearby, but not touching the trap (to provide resting places for arriving flies, but not entry points for ants).

When using dry traps such as Lynfield traps or Sensus® traps baited with parapheromones, coat the wire hanging with a thin layer of 'stickem' (Tanglefoot). This will prevent entry of ants, which would feed on captured specimens. The Tanglefoot should not be applied on the hook of the trap, as this would not allow for cleaning and servicing of traps.

Use ribbons (or paint spray) to mark the position of each trap, in such a

manner, that the ribbon can be seen easily from the main access road.

A sketch of the survey route and trap position should be plotted. The references of the trap location should include visible landmarks. In case traps are placed in settlement areas, references should include the full address of the property. The application of geographic positioning systems (GPS) can be a very effective tool in both trap location as well as analysis of trap captures. Geographical coordinates of each trap should therefore be referenced, if a GPS device is available.

In a datasheet (**Annex 2**), the trap ID number, location (area), trap station (e.g. farm or forest name or house property), habitat type (e.g. mango orchard, forest or settlement), trap type, trap lure, date of placement, date of collection and GPS coordinates should be noted as well as details on the fruit fly and non-target species caught.

Trapping density

It is very important to consider the trapping density in a survey. Density will depend first of all on the objective of the trapping survey. Density will also depend on lure/attractant efficiency, trap efficiency, altitude, location (orchards or settlement or marginal or points of entry), and the presence of hosts, the climate, topography and fruit fly species (IAEA, 2003).

Detection surveys: Early detection should be carried out at points of entry, urban areas with ports and airports and in production areas. Points of entry include airports, seaports, border points and marketplaces for fruit trade. For parapheromone-based or food-based traps, trap density at points of entry should be between 4–10 traps/ km². In production areas, trap density should be 1 trap/ km².

Delimiting surveys: Delimiting surveys are carried out to determine the spread of an invasive pest. A delimiting survey must be carried as soon as an invasive fly is detected. The area immediately surrounding each invasive fly find should be designated as a core area of a 1 km x 1 km square grid (Draft Annex 1 to ISPM No. 26, 2008). Parapheromone baited traps and Biolure (3-component) baited traps should be placed within the core area (**Table 2.2**). Moving outwards from the core area, there should be three surrounding zones of sizes 8, 16 and 24 km². In each of the surrounding zones, only parapheromone-baited traps should be placed (**Table 2.2**). Additionally, radiating transects of about 100 km should also be set out from the third surrounding zone and should follow main road networks. Parapheromone baited traps should be set out every 2 km for the first 10 km, every 5 km thereafter for the next 40 km and every 10 km for the 50 remaining km. Moreover, within 50 km radius of the core area, parapheromone-baited

traps should be set out in farms with orchards or fields containing host material. The density of traps in the farms would be determined by farm size, crops and extent of plantings. All traps should be serviced weekly, with core traps serviced daily for the first week. Traps should be maintained through three generations of the invasive fly, after the last fruit fly find.

If a fruit fly is found in an additional trap, another 1 km x 1 km core area, three surrounding zones and radiating transects should be set around the fly find.

Table 2.2. Delimiting survey for invasive fruit fly pests

Zones	Number of traps per km ²	
	<i>Bactrocera</i> spp. responding to methyl eugenol (ME) e.g. <i>B. invadens</i> , <i>B. zonata</i>	<i>Bactrocera</i> spp. responding to Cuelure (CUE) e.g. <i>B. cucurbitae</i>
Core	10 ME + 10 Biolure 3C	20 CUE + 10 Biolure 3C
1st surrounding zone	2 ME	10 CUE
2nd surrounding zone	2 ME	6 CUE
3rd surrounding zone	2 ME	4 CUE

(Source: www.ippc.int: Draft Annex 1 to ISPM No. 26, 2008).

Monitoring surveys: Trap density should be higher in production areas compared to marginal areas. Trap density in marginal areas should also be higher compared to settlement areas. For food-based traps, the following trap densities are recommended in the different locations listed above:

- Production areas — 4 to 8 traps/km²
- Marginal areas — 2 to 4 traps/km²
- Settlement — 0.5 to 1 trap/km².

Preparation and handling of traps and attractants

Preparation

Before setting out for trapping surveys, it is recommended to prepare attractants (dilution and mixtures with insecticide) in the lab. Use glass-measuring cylinders to carry out dilutions or mixtures. It is important to determine beforehand **the type and amount of attractant, and number of traps required**. Carry the required amount of attractant and traps that would be needed. It is advisable to carry a few spare traps in case of accidental damage or non-functionality of traps.

Liquid protein food bait: For trapping using liquid food bait, a 2% protein bait solution (dilution with water) is recommended. Each Lynfield trap should contain 250 ml of the diluted solution. Eight grams of borax should be added to each trap to slow down decomposition of trapped specimens.

Dry synthetic food bait: When Multilure traps baited with dry synthetic food bait (putrescine, trimethylamine and ammonium acetate) are used as wet traps, each trap should contain 270 ml of water to which 1–2 drops of Triton (0.1%) or propylene glycol (10%) are added to break the surface water tension. When Multilure traps are baited with dry synthetic food baits and used as dry traps, a DDVP strip (1 to 1.5 cm in length) should be placed at the bottom of each trap to kill attracted flies. The dry food lures are available as sachets containing the membrane dispensers and can be carried as such to the field. The DDVP can be cut in strips of 1–1.5 cm in length and carried to the field in a tight jar.

Male lures: Liquid male lures such as methyl eugenol can be combined with an insecticide such as malathion in the ratio 4:1 (4 parts male lure to 1 part insecticide). Cotton wicks soaked in the lure and insecticide mixture till saturation (but not dripping) can be used as dispensers. The soaked cotton wicks can be stored in an airtight jar and transported to the field.

Parapheromone polymeric plugs that are available in sachets can be taken to the field in that form. DDVP strips (each 1 to 1.5 cm length) should be prepared and placed in a tight jar for placement at the bottom of the trap. Each trap shall contain one DDVP strip. Pack traps and attractants separately to avoid any spillage and trap contamination during transport.

Handling

Liquid food bait should be poured carefully inside the trap without any spillage on the external surface of the trap body. Make sure that no liquid bait contacts the surface between the top and bottom parts of McPhail traps since this would not allow for easy opening of traps. For membrane dispensers of dry synthetic baits, place them on the sides at the top part of the Multilure trap in such a way as not to obstruct the closing of the trap.

When using male lure/insecticide mixture soaked on cotton wick, pick the cotton wick using a pair of forceps and place in the bait basket. Avoid touching the external surface of the trap. Use different forceps for different lures and store them separately.

When using parapheromones in polymeric plugs, gently tear open the sachet and push the plug into the bait basket without directly touching the plug with your fingers or touching the outside of the trap with the plug. Using gloves, place a new DDVP strip at the bottom of the trap. The

DDVP strips should be prepared in the laboratory in advance and placed in separate airtight jars for easy handling.

Trap servicing and re-baiting

Servicing

Servicing interval depends on the objectives of the trapping survey and the type and formulation of attractant that is being used. During servicing of traps, record the date of collection in the datasheet and if no flies are caught, record nil captures for the particular trap in question (**Annex 2**).

Baited traps should be opened with care in case there are live flies inside the trap. Note that for detection and delimiting surveys, this is important as presence or absence of flies in particular areas should be confirmed. In the case of a trap that uses a liquid retention system, the live flies can be carefully removed by aspiration. In case of a dry trap that uses an insecticide as retention system, the entry holes of the trap can be blocked. Ensure that you wear gloves if you use hands to block the holes. This will concentrate the insecticide vapour inside the trap and facilitate fast kill of the flies inside the trap.

Re-baiting

Food baits. Traps containing liquid baits (protein baits or water in synthetic food bait traps) in hot and dry climates should be re-baited twice per week, while those in hot and humid or cool climates should be re-baited once per week. The liquid should be poured in a container through a sieve to recover the trapped specimens. The specimens can be collected using a fine brush or a pair of soft forceps.

For the dry synthetic food baits, the membrane dispensers remain active for 4–6 weeks. If servicing is done within this period, the dispensers can be left inside the trap. After 4–6 weeks, the membrane dispensers should be replaced. Following re-baiting, traps should be closed and left for a similar interval at the same spot or they can be rotated within a production area depending on the trapping survey objectives.

Male lures: Specimens in a trap containing male lure can be collected using a fine brush or a pair of soft forceps. Make sure to use a different brush or forceps for each type of lure used in the survey and label the brush or forceps accordingly (e.g. ME, TML, CUE). Usually a cotton wick baited with attractant and insecticide mixture can last for up to 4 weeks in the field. If serviced within this period, the cotton wick can remain in the trap after specimen collection.

When polymeric plug dispensers and killing strips are used, it should also be noted that both remain active for a period of 6 weeks. If a trap baited with this type of dispenser is serviced within this period, both the dispenser and the killing strip can remain in the trap if they are still active. After 6 weeks, the dispenser and killing strips should be carefully removed with different pairs of forceps. Gently tear open a new sachet of dispenser and push the plug (of the same lure) into the bait basket without touching the plug with your fingers or touching the outside of the trap with the plug. Using gloves, place a new DDVP strip at the bottom of the trap. Remove the gloves and close the trap.

How to report the trapping results

The outcome of trapping activity should be reported as flies per trap per day. This is a population index representing the average number of flies captured in one trap in one day that the trap is exposed to in the field (IAEA, 2003). The function of this population index is to have a relative measure of the size of the adult population in a given space and time. It can be used to compare fly populations between regions, determine population fluctuations in time and determine differences in size of adult population between different areas (e.g. untreated areas v. suppression areas).

It is calculated as follows: $F = F/T \times D$

Where F = Total number of flies

T = Number of serviced traps

D = Average number of days traps were exposed in the field.

CHAPTER 3

Fruit Fly Suppression— Purpose, Tools and Methodology

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Purpose

The purpose of fruit fly suppression is to reduce loss in fruit and vegetable yield due to fruit fly infestation and enhance their quality by eliminating fruit fly maggots and blemishes caused by the insect.

Tools

The materials and tools required for fruit fly suppression include:

- (a) Baits and traps
- (b) Killing agents (which can be pesticides, parasitoids, predators or biopesticides)
- (c) Sprayers
- (d) Augmentorium®
- (e) Fruit wrapping bags.

Suppression methods

There are several methods of fruit fly suppression including application of baiting technique, male annihilation technique, sterile insect technique, orchard sanitation and use of biological control agents such as parasitoids, predators and pathogens. There are also a number of remedy methods, which although they do not directly suppress fruit fly populations, they prevent or reduce damage caused by them. Such methods are fruit bagging or wrapping, early harvesting and post-harvest fruit treatment.

Because a complex of fruit fly species commonly co-exist in the fragmented fruit and vegetable production systems in Africa, the approach being promoted in Africa is a combination of methods, i.e. integrated pest management (IPM) technique.

Recommended IPM components

Baiting techniques

Bait sprays

Fruit fly suppression is mainly based on the use of food baits (hydrolysed proteins or their ammonium mimics) combined with a killing agent, such as a pesticide, and applied in localised spots. This method targets adult flies, mainly females, and aims at attracting (and killing) them before they infest fruits (lay eggs into the fruits). The bait attracts the fruit flies from a distance to the spot of application, where the flies feed on the bait, ingest the pesticide and die. After mixing the bait with a pesticide, it is normally applied to one or more—depending on the bait—1 square metre spot in the canopy of each tree in the orchard in the case of fruit flies that attack fruit trees (e.g. *Bactrocera invadens*, *Ceratitis cosyra*) (Ekesi *et al.*, 2007; Vayssières *et al.*, 2007). The spray should be preferably targeted to the lower surface of leaves to enhance the persistence of bait activity and reduce chances of washing by rainfall. This is applied on a weekly basis starting from when the fruits are about 1.3 cm (1/2") in size and when monitoring data indicates that fruit flies are already present, and continues until the very end of harvest.

Bait application technology for native *Dacus* species and the exotic melon fly *Bactrocera cucurbitae* that mainly damage cucurbits is different from fruit flies that attack fruit tree crops. These cucurbit fruit flies generally inhabit the vegetation around the edges of the field and female flies only enter the fields to lay eggs. To suppress these fruit flies, bait sprays are applied to the border or trap plants where the fruit flies roost instead of directly on the cucurbit plants. Phytotoxicity of some baits to delicate cucurbit leaves is another reason for the bait application to border vegetation. Important alternative host plants that these flies roost in, and that could be utilised as trap crop on the border include sorghum, castor bean, cassava and corn.

Three to six weeks before planting cucurbits – depending on growth rate of the trap crop—appropriate alternative host plants (e.g. maize, sorghum, castor bean) that are favoured by the target cucurbit fruit flies should be planted around the borders of the cucurbit plants. Flies should be monitored with relevant attractant (male lure or food baits) in or on the border of crop fields. Suppression should be carried out using food attractant like GF-120 (Success®) or Mazoferm® (mixed with insecticide) by applying the bait to the non-host border plant when the first flowers appear on the cucurbit crop (Hanna *et al.*, unpublished data).

A number of commercial baits are available on the market such as Nulure®, Mazoferm, Hym lure®, Buminal® and Solbait® (see Chapter 2) that can be mixed with pesticides such as Spinosad and applied as above.

Another commercial product is GF-120. This bait is already pre-mixed with pesticide (Spinosad) (**Plate 18**) and can be applied using the on-label information on the container.

A major problem in the use of baits in Africa is that most of them have to be imported, thus making them expensive and inaccessible to a large number of fruit and vegetable growers. Most recently, however, some of these products are being produced locally and include Mazoferm (available from Corn Products International, Kenya) (**Plate 19**) and Hym lure (available from Savoury Food Industries [PTY] Limited, South Africa). Research at the International Centre of Insect Physiology and Ecology (*icipe*) and the International Institute of Tropical Agriculture (IITA) has also shown that a protein bait from brewer's yeast (obtained as an industrial by-product) when mixed with appropriate insecticide (e.g. Spinosad) and applied in low volumes as spot spray to 1 square metre of mango canopy or to the mango trunk, provides good control of mango-infesting fruit flies. The *icipe* developed product is also likely to be available locally as Dudulure® in the near future as a cost-effective alternative to the imported products.



Plate 18. GF-120 Spinosad bait



Plate 19. Mazoferm bait

Preparation of the bait spray: The bait spray can be applied with a 15-litre knapsack sprayer or any other spraying device with a coarse adjustable nozzle. Label the sprayer with a permanent marker indicating its specific use. Measure the amount of bait required for the day's treatment (based on site parameters). Inspect the sprayer for operation prior to filling by

adding water, applying pressure and spraying. Pour the mixture through the knapsack sprayer filtering system. Do not fill beyond the working specifications of the sprayer.

Calibration of the pump for bait spraying: The sprayer is pressurised and the nozzle is adjusted for coarse droplets. Spray 50 ml of bait into a small graduated container by pressing the trigger (approximately 12 times) until the required amount of bait is dispensed. Alternatively, one can press the trigger continuously to deliver 50 ml of the bait. Note the duration in seconds. Both measures may vary according to pressure, nozzle settings of the sprayer and the person pressing the trigger. (Note that the same person spraying has to do the calibration.) The calibration should be repeated several times to ensure correct dosage delivery.

Bait spray application: Approximately, one square meter of foliage is sprayed with the bait in such a way that the bait drift does not hit the fruits on the tree. Depending on tree architecture some branches may be very low. Spray downwind to avoid bait drifting towards you. Every tree is sprayed unless agreed otherwise. If other tree species grow in the same treatment plot, apply the bait to their foliage as well to keep a dense application grid. Follow similar guidelines for bait application on trap plants surrounding cucurbit fields, but with a few differences: apply the bait on the lower surface of the trap plant and on 0.5 square meter spots of canopy for 15 square metres of trap plants. For orchards and cucurbit fields, weekly application on each tree is placed on a different spot on the foliage to avoid accumulation of bait and to eventually increase the treated surface over time.

If a considerable amount of rain occurs (>25 mm) within 24/48 hours after spray application, the procedure has to be repeated to replace bait that could have been washed off. In the event of equipment failure (i.e. nozzle clogging), stop immediately, rectify the problem and reapply the full dosage to the same tree.

Bait station

A bait station is a distinct device that combines a lure or bait with a toxicant that attracts and kills fruit flies without retaining them in the device. This method of fruit fly control is an alternative to aerial and ground-bait sprays. The stations could be (i) a retrievable device, (ii) a biodegradable device that can remain in the field and, (iii) a device that is based on direct application to a substrate. The attractant that can be used in bait stations can include both male-specific (e.g. methyl eugenol or Cuelure), or male and female attractant (e.g. Mazoferm). Recommended killing agents can be contact, consumable, or an entomopathogen (e.g. *Metarhizium anisopliae*) and can

be fast acting or slow acting and through autodissemination (see below). The development of bait stations is still at infancy and research is underway to assess their persistence, appropriate density, deployment strategy and cost-benefit of the technique. Several devices are being tested worldwide (**Plate 20a–c**) and once fully developed, should provide additional arsenals to the fruit fly management toolbox in the near future.

We recommend that baiting techniques should be considered as one of the primary components among the various management options listed here because of the following advantages: (1) the technique is less harmful to beneficial organisms, the environment and the operator because of the spot application method, (2) cost is substantially lower because less insecticide and bait are used on the tree or crop, (3) less time is required and thus less demand for labour, (4) cheap and simpler spraying equipment can be used and, (5) application can be directed away from fruits to minimise problems of residues in fruits.

Despite these advantages, the baiting techniques should not be used as stand-alone approaches because their effectiveness can be less than desirable under high pest population pressure. These techniques must, therefore, be integrated with all the other management methods listed in this chapter.

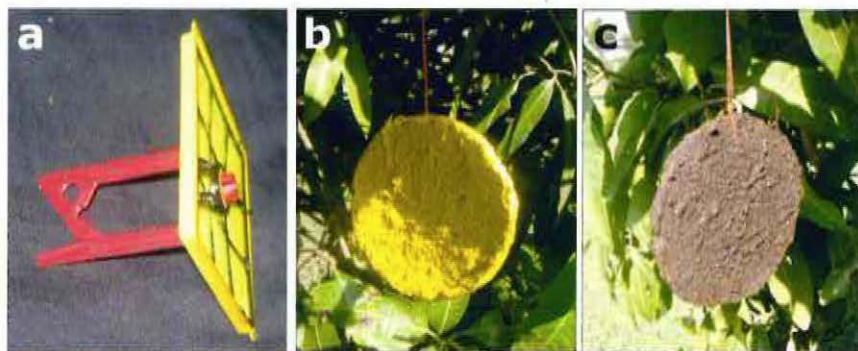


Plate 20. Bait station devices (a) Retrievable (Quest Development, South Africa), (b) biodegradable, (c) biodegradable

Male annihilation technique

Male annihilation technique (MAT) is a control strategy that involves the deployment of high density trapping stations consisting of a male attractant combined with an insecticide. The aim is to reduce male fruit fly populations to low levels that mating does not occur (in the case of eradication) or reduced to low levels (in the case of suppression). Compressed fibre boards, coconut husks (**Plate 21**), and string or cord soaked in the attractant/insecticide

mixture are distributed at the rate of 250 per km² and repeated after every 6–8 weeks. Cotton wicks soaked in the attractant/insecticide mixture and placed in Lynfield traps (**Plate 22**) is also a common practice. MAT has been used for eradication of fruit flies such as the oriental fruit fly *Bactrocera dorsalis* and the papaya fruit fly *B. papayae* (Allwood and Drew, 1997). MAT is currently being promoted by icipe and IITA in Africa as a component of the IPM strategy for *Bactrocera*, *Ceratitis* and *Dacus* fruit fly pests. Male attractants such as methyl eugenol, Cuelure, Vertlure and terpinyl acetate can be used with appropriate toxicant such as malathion, fipronil, spinosad and deployed in the orchard and vegetable farms preferably at the periphery of the farms. If combined with management techniques such as bait sprays or baiting stations, fungal pathogens, parasitoid releases and conservation, and orchard sanitation, significant reduction in fruit fly population can be achieved within the growing season.



Plate 21. Coconut husk impregnated with methyl eugenol and malathion for suppression of *B. invadens* on mango



Plate 22. Lynfield trap baited with methyl eugenol and malathion mixture for *B. invadens* suppression on mango

Biological control

Biological control is the human use of specifically chosen beneficial organism (parasitoid, predator, or pathogen), also referred to as “farmers’ friends”, to reduce the damage caused by a pest or related species of a pest.

Parasitoids refer to a group of beneficial insects whose immature stages develop on or within a single insect host (pest), ultimately killing the host.

Predator is mainly an organism that feeds on the prey directly and can consume a large number of prey during its lifetime. **Pathogen** is a disease-causing organism, generally a bacterium, fungus, protozoan or virus.

There are three main types of biological control approaches, though these approaches are not mutually exclusive and often overlap:

Classical biological control: This involves the importation of exotic natural enemies to control an exotic pest(s).

Augmentation biological control: This involves mass rearing and supplemental field releases of natural enemies.

Conservation biological control: This involves the manipulation of the environment in such a way that the activity and effectiveness of indigenous natural enemies as biological control agent is enhanced.

All these approaches are being exploited for the management of economically important tephritid fruit flies in Africa

Use of parasitoid

One of the most outstanding successes of classical biological control against fruit flies is attributed to the use of the egg parasitoid, *Fopius arisanus* against *Bactrocera dorsalis* (Vargas et al., 2007), a close relative of *B. invadens*. This parasitoid is presently being released in Africa. It attacks the eggs of the target fly and develops through the larval stages of its host and emerges as an adult in the pupa of the host fruit flies (**Figure 19**). Following the invasion of *B. invadens* into Africa in 2003, *icipe* and IITA imported *F. arisanus* (**Plate 23**) from Hawaii for testing and release against the pest. Laboratory studies have shown that this parasitoid is highly efficient against *B. invadens* (Mohamed et al., 2009), and subsequent to the issuance of release permits by relevant government authorities, *icipe* and IITA, in close collaboration with national partners have started field releases of the parasitoid in several African countries. Field suppression by this parasitoid will ultimately reduce the population of *B. invadens* to levels that may reduce the pressure on the efficacy of the other management methods. With regard to melon fly *B. cucurbitae*, *icipe*, IITA and CIRAD plan to also introduce *Psytalia fletcheri* to reduce the population of this pest on cucurbits.

The principal advantage of classical biological control is that once established, the persistence and activity of the introduced natural enemy will not need farmer intervention and as such biological control will be accomplished at no cost to the farmer. Additionally, classical biological control is safer to the user, consumer and the environment than other control methods, particularly those that require chemical applications; and fruit flies do not become resistant to the parasitoid. The parasitoid must, however, not be relied upon as a sole control agent and the action of the parasitoid must be complemented with other methods outlined in this chapter. For full benefit, this parasitoid must also be effectively conserved in the agroecosystem. (**See section on conservation.**)

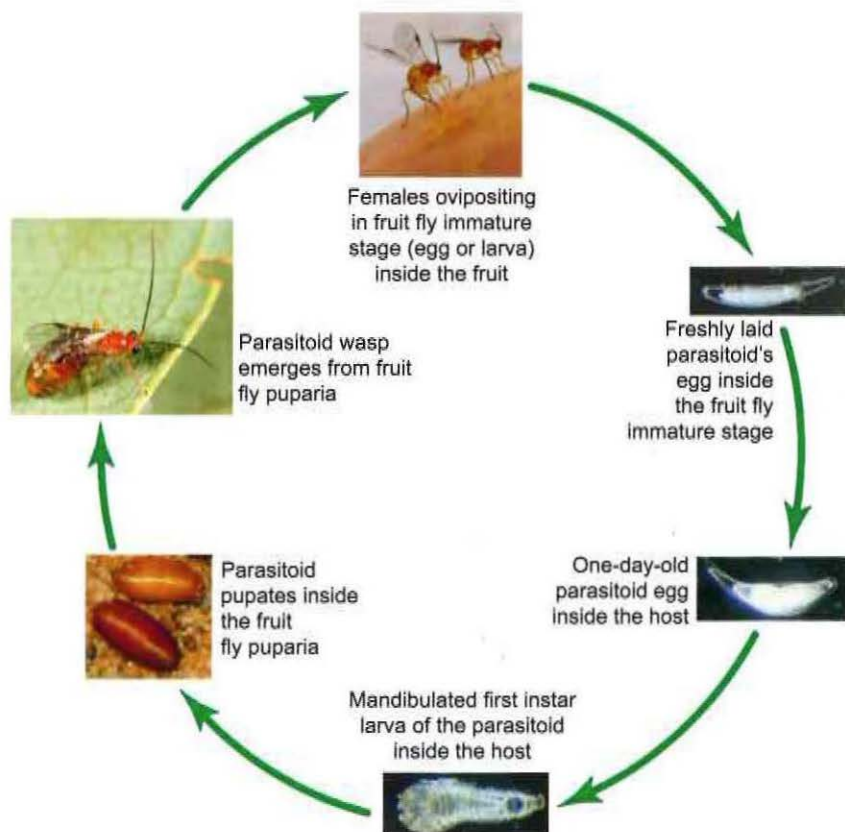


Figure 19. Generalised life cycle of a solitary endoparasitoid (e.g. *F. arisanus* or *P. cosyrae*) of fruit flies



Plate 23. Adult *Fopius arisanus*

Use of fungal pathogens

Fungal pathogens can be used for the suppression of fruit flies targeting adult or the pupariating larval stages. Research at *icipe* has identified a potent fungal isolate (*Metarhizium anisopliae* isolate ICIPE 20) a naturally occurring fungus isolated from the soil that is being used worldwide as a biological pesticide for controlling different kinds of insect pests. This isolate is effective against both developmental stages of the major fruit fly species (e.g. *B. invadens*, *B. cucurbitae*, *Ceratitis cosyra*, *C. fasciventris*, *C. rosa*, *C. capitata*, *C. anonae*).

The auto-dissemination technique is the recommended control method for adult fruit flies (Ekesi *et al.*, 2007). This strategy is based on attracting the adult fruit flies using a visual, chemical or food lure to a focal point of the fungal pathogens where the fruit flies pick up the fungal spores and disseminate them among target population before they finally die. Contamination of other population is a function of horizontal transmission between healthy and fungal contaminated individuals in the wild and in fruit flies this is achieved mainly through mating, physical contact and lek (gathering together of males to attract females) formation by male flies.

The auto-dissemination technique for fruit fly suppression utilises an auto-inoculator consisting of a modified Lynfield trap that is covered on the inside with a velvet material that is impregnated with dry fungal spores (Plate 24). Loofa or synthetic sponge soaked in appropriate food attractant (e.g. Mazoferm) is attached using a wire string to the inside of the trap to serve as the lure (Plate 24). This device is deployed in the field at the rate of 100 devices/ha. Using this method, results from *icipe* field trials have shown significant reduction in fruit fly population on mango (Ekesi *et al.*, 2007; S. Ekesi *et al.*, unpublished data).



Plate 24. Auto-inoculating device consisting of (a) a Lynfield trap lined with velvet material and coated with spores of the fungus, *Metarhizium anisopliae*, and protein hydrolysate bait on loofa sponge and (b) deployed in a mango orchard

The cost of fungus-based biopesticides is considered as one of the constraints in their use as biocontrol agents. For example, the estimated cost of 1 kg of dry spores of *M. anisopliae* in pilot-scale production plant is about US\$ 210. Two–three kg of the spores are often required for inundative treatment of one ha of a crop. This is considered as exorbitant for the average producer, but could be reasonable for those that export the fruit and get premium prices for them. However, using the auto-dissemination approach, only 0.8–1 g of conidia is required to contaminate one velvet-coated Lynfield trap. Therefore, an orchard of mango with 100 trees/ha will only require a weekly application of 80–100 g of conidia per hectare. The fungus can also persist for one month in the device and weekly application is not necessary and therefore obviously, this is a cost effective control strategy.

During development, mature fruit fly maggots drop from the fruits to the ground, burrow into the soil and form a resting stage called the puparia (White and Elson-Harris, 1992). An important part of fruit fly suppression research at *icipe* also includes soil treatment with fungal pathogens to kill the mature maggots and puparia (Ekesi *et al.*, 2007). The active ingredient is the fungus isolate *M. anisopliae* ICIPE 20. The fungus is formulated as granules (Plate 25) and oil-based. The granules can be dispersed by hand and then raked into the soil while the oil-based formulation is applied using a sprayer. Either formulation is effective and is applied only once in the season and can persist in the soil for over a year. Removal of excessive leaf litter before application enhances activity of the fungus. The fungus is compatible with most commonly available pesticides but should not be mixed directly with insecticides, fungicides and fertilisers meant for soil application, as they may delay activity of the fungus.

The fungus (as spores for adult, granules and oil-based for maggots and puparia) is in the process of being registered and discussions are underway



Plate 25. A fungus (*Metarhizium anisopliae*) formulated as granules for soil inoculation

with Fondation Agir pour l'Éducation et la Santé (FAES), Dakar, Senegal in West Africa and ReallPM in East Africa who are both interested in commercialisation of the product.

Use of predator

The predatory weaver ant *Oecophylla longinoda* (**Plate 26**) can be utilised to protect mango and citrus fruits from damage by fruit flies provided that the tree hosts or provides food resources (such as homopteran honeydew and/or plant nectar) to the ant. Homopterans, such as mealybugs and scale insects, are tended by workers of the ant colony for their honeydew that comprises a substantial portion of the ant's diet. In Benin, the weaver ant has been shown to significantly reduce fruit fly infestation on mango (Van Mele *et al.*, 2007). The efficacy of the ant is largely attributed to deterrence and disturbance during fruit fly oviposition thereby reducing damage.

To be effective, the ants must be effectively conserved in the orchard. Practices that aid conservation of the ant include minimising pesticide applications, application of pesticides that are less harmful to the ant and supplementing the diet of the ant with dried fish during periods of food scarcity especially in the dry season. Because the ant also tends to form a mosaic of colonies, practices that facilitate dispersal, such as connection of adjacent trees and orchards with rope bridges, are common to recruit ants to unoccupied trees and increase the area under protection. Existing colonies can also be harvested and redistributed to other trees that require protection. Newly introduced colonies may establish faster if provided with supplementary food that meets their energy and nutritional requirements as above. Other conservation techniques include mixed-planting of alternate host plant species that favour the ant together with the main crop (Way and Khoo, 1991).



Plate 26. The weaver ant *Oecophylla longinoda* scavenging for fruit flies in Multilure trap

The efficacy of *O. longinoda* can be adversely affected by other ant species such as the big headed ant *Pheidole megacephala* that suppresses or completely destroys *O. longinoda* colonies by preying on eggs and pupae. Pesticidal bait can be used to overcome this effect (Zerhusen and Rashid, 1992). An alternative to pesticides could be the use of a physical barrier to exclude other ant species (e.g. Tanglefoot®, a commercially available clear sticky polybutene gel) as a band around weaver ant-occupied trees.

As mentioned above, the weaver ant depends on homopteran insects (scales and mealybugs) for their carbohydrate requirements. If these homopterans are not present in the orchard, the ants will bring these pests to the orchard especially when colonising a new patch. In tending the scales and mealybugs, the ant protects them from their natural enemies and can increase the problem of the homopteran pests through either direct damage or physical appearance due to the sooty moulds that develop from the secretions of homopterans that are 'raised' by the ants. This homopteran tending problem may be overcome by providing alternative diet to the ant such as fish.

Large-scale mass releases of *F. arisanus* are underway in several countries across Africa. Weaver ants can deter the activity of other natural enemies and significant aggression of *O. longinoda* to *F. arisanus* especially at high densities is common in the field. If resident organisms are detrimental to classical biological control agent then the biocontrol agent's establishment and/or efficacy can be inhibited. In conserving and promoting the use of the weaver ant, the grower must take into consideration the impact of the ant on the parasitoids. It is, however, possible that in the long run both natural enemies may learn to co-exist.

Weaver ants are also highly territorial and as the colonies fight for territory they contaminate fruits with formic acid (which they use in defence). The presence of the ant at high densities may also lower flower-visiting rate of beneficial pollinators in the orchard thereby reducing fruit set. This aggressive behaviour and localised high densities can be minimised by encouraging dispersal and separation of ant colonies.

The weaver ants can also be highly aggressive to humans especially during harvest if disturbed and often inflict painful bites and can spray formic acid directly at the bite wound resulting in intense discomfort. Bites and disturbances to humans can be minimised by spraying the tree with water prior to harvest, rubbing wood ash on tree branches of the tree to be harvested to reduce their activity, rubbing wood ash on the hands and arms to prevent the ants from biting and luring the ants away to trees where no harvest is taking place by placing food on the branches.

Conservation of natural enemies

Several species of parasitoids and predators abound in fruits and vegetable agroecosystems, which can contribute to the suppression of fruit flies. Native parasitoid species may include *Tetrastichus giffardii*, *Psytalia cosyrae* (**Plate 27a, b**), *P. concolor*, *Fopius caudatus*, *Dirhinus giffardii* and *Spalangia* spp. Predators may include spiders, ants, carabid beetles and staphylinid beetles. For example, a spider web on the ground (Plate 28) in orchards can trap adult flies emerging from the puparia. Efforts to conserve these natural enemies through efficient management based on the use of the various components of fruit fly management described here may contribute to the overall suppression of fruit flies. In addition to conservation methods such as the use of Augmentorium (see below), baiting and male annihilation technique and fungal pathogen, other conservation approaches such as habitat management may favour parasitoid survival. Habitat manipulation can be achieved by planting flowers within and around the orchard margins



Plate 27. Indigenous natural enemies (a) *Tetrastichus giffardii* and (b) *Psytalia cosyrae*



Plate 28. Spider web on the ground in an orchard

to sustain parasitoids. Parasitoids can use the vegetation as refugia and food source. This is especially important because at the beginning of the fruiting season, there is usually a time lag before population build-up of the parasitoid and proper habitat manipulation will ensure that sufficient numbers of the parasitoids are available in the orchard before the fruit fly pests become established. Blanket spray of chemical pesticides will also kill the parasitoids. In general parasitoids are usually more sensitive to chemical pesticide than the fruit fly pests. Judicious use of pesticides (fungicides and insecticides) is strongly recommended.

Orchard sanitation

Poorly managed or abandoned orchards and a variety of wild hosts can result in high population build up of fruit flies. Orchard sanitation, which entails the collection and destruction of all infested fruits found on the tree and fallen fruits containing fruit fly maggots on the ground, can contribute significantly to reduction of fruit fly populations in the orchard. This is a very laborious exercise but can be quite effective if the fruits are collected regularly and destroyed twice a week for the entire season. The fallen fruits usually serve as reservoirs of parasitoids that kill fruit flies. In this regard, the collected fruits should be destroyed/composted by dumping them in the Augmentorium (Klungness *et al.*, 2005) (**Plate 29**) rather than burning or burying to kill the fruit fly maggots. The Augmentorium serves the double purpose of field sanitation and conservation of natural enemies of fruit flies. It is a tent-like structure that sequesters fruit flies that emerge from fallen rotten fruits that are collected from the field and deposited in the structure, while at the same time conserving their natural enemies by allowing parasitoids to escape from the structure through a fine mesh at the top of the tent. The escape mesh for the parasitoid is the yellow portion of the Augmentorium as seen in **Plate 29**.



Plate 29. An Augmentorium in place in a mango orchard



Plate 30. Mechanical fruit bagging in a mango orchard

Mechanical fruit protection

Notwithstanding the presence of fruit flies in the orchard, wrapping, bagging or sleeving of individual fruits or bunches of fruits with newspaper or paper bags (**Plate 30**) to prevent adult fruit flies from laying eggs on the fruits is also a practice of producing fruits that are free from fruit flies attack. To be effective, the fruits must be wrapped or bagged well before fruit fly attack, i.e. at least one month before harvest. Although laborious, it is an effective method for high value fruit produced for export or fruits produced in backyard gardens for family use.

Early harvesting

Fruit fly development does not occur in certain fruits such as papaya, banana and sapodilla when they are 100% green. Only the ripe fruits are good hosts. Thus early harvesting to evade fruit fly infestation is an important technique in the production of these fruits. Although early harvest is practised for mango, especially in Kenya, this practice is not effective as some fruit fly species like *Bactrocera invadens* and *Ceratitis cosyra* are capable of infesting even immature or mature green mangoes.

Post-harvest fruit treatment

Without post-harvest treatment to provide quarantine security, export of fruits and vegetables to lucrative markets abroad is limited due to quarantine restrictions. Therefore, effective post-harvest quarantine treatments that are not harmful to either the produce or people coming in contact with or consuming the fruit must be applied to the export commodities. The available quarantine treatment technologies (as alternatives to toxic fumigation) include (1) heat treatment to increase temperature of host fruit above thermal limits of the fruit fly, (2) cold treatment to decrease temperature of host fruit below the thermal limit of the fruit fly and (3) irradiation to kill the fruit fly. In Africa, the parameters for treating fruits against fruit flies are being developed at *icipe*. Once developed, these treatments should increase the export potential of tropical fruits and vegetables from Africa.

CHAPTER 4

Safety Precautions and Conducts During Monitoring and Suppression

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Safety and cross-contamination precautions during monitoring

- Before starting your trap servicing, prepare a container for disposing materials.
- Wear fresh disposable gloves (or cover hands with new plastic bags) while handling lures/bait.
- Avoid dropping lures/bait on the ground. In case this happens, and if feasible, remove the contaminated material and dispose of properly.
- All contaminated material (e.g., gloves, tissue, empty lure bags) should be collected in an airtight container and taken to the laboratory for safe disposal.
- Baited traps must be handled with extreme care to avoid external contamination.
- During transport, baits must be stored in tight containers and separated one from the other.
- Carry only the necessary quantity of lures/bait to the field.

Safety and cross-contamination precautions during suppression

- Strictly transport baits separately (i.e., use different tightly closed containers per bait).
- Carry only the necessary quantity of baits and fungus to the field.
- Avoid accidental spillage into the transport vehicle. In the event of contamination, use soap and water to clean the spill thoroughly. Use gloves and dispose of as indicated below.
- Wear fresh disposable gloves (or cover hands with new plastic bags) while handling each bait or fungus.
- Do not spill bait on the ground. In case of spillage, if feasible, remove the contaminated material and dispose of properly (similar to other materials, e.g. bait). If cleaning is not possible, the site must be changed.

- Gather all contaminated materials (e.g. gloves, tissue, empty bait containers), double-pack and dispose of safely (e.g. by incineration, burial).
- After application, wash hands, arms and face thoroughly with soap and water before eating, drinking or smoking.
- Always carry water and soap with you in the event of contamination. Flush eyes if spray gets into them. If bait is ingested drink large quantities of water. In either case seek medical attention immediately.
- Avoid inhaling fungal dust.
- Wear proper safety equipment when applying insecticides (i.e. gloves, boots and eye protection).
- If protective clothing is not provided, carry along a second set of clothing in the event of contamination.
- If contamination occurs, immediately remove the affected clothing and bath yourself if necessary.
- Clothes should be disposed of if soaked with bait spray.
- Wash treatment clothes separately from other clothing.
- Do not eat, drink or smoke while mixing or applying the baits/fungus, or before you have washed yourself.
- Baited traps must be handled with extreme care to avoid spillage.
- Re-bait only one trap at a time.
- Before mixing, read the product label and follow the recommendations carefully.
- Check all spray equipment to ensure that it is in good condition (especially check for blocked pipes and nozzles).
- Wear impermeable gloves, glasses, mask and boots underneath your trousers.
- Always ensure that your mixtures are prepared outdoors, preferably near a tap of running water.
- Do not prepare more than the quantity needed for the exercise at hand.
- Do not store unused mixture for more than 24 h.
- Do not spray for more than 3 to 4 h per day.
- Do not spray in strong winds or high temperatures.
- Do not treat near source of water (wells, dams, river, etc.)
- Do not blow into blocked tubes with the mouth.
- Wash off any splashes on your skin immediately.
- After treatment wash all equipment used away from water sources.
- Wash off the interior and exterior of empty containers and make them unusable for domestic purposes by perforating or crushing them.
- On completion, wash yourself carefully with soap and water or take a proper shower, change clothes and wash the dirty clothes.

Lure/bait disposal

- Methyl eugenol lures should be double-packed and incinerated or handed over to a disposal service.
- Under no circumstances should lures be left in the vicinity of the monitoring site, laboratory or in the vehicle.

Storage of bait, fungus and pesticides

- Store products, equipment and tools in a securely locked cupboard away from habitations and especially children.
- Ensure that fire extinguishers are kept close to storage rooms.
- Store all baits separately in tightly closed containers in well-ventilated or air-conditioned rooms or in a refrigerator, if possible.
- Store fungal granules in original bags in a dry area, within a temperature range of 5–10 °C.
- Check your products regularly to ensure that they are not leaking.
- Place some absorbent materials near the store in case of accidental leaks and spills.

CHAPTER 5

Host Fruit Processing— Purpose, Tools and Methodology

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Background

The following recommendations evolved out of a four-year study of the insects reared from wild fruits of Kenya. The material we used and the methods we followed served us well during our study. However, there are many ways to tackle a problem and we have no doubt that alternative approaches may be as useful as, or superior to, ours.

Purpose of the collection

There are many reasons for collecting fruits. The more obvious ones are to:

1. Produce a reference collection of tephritids (and other insects) to provide specimens of species that are, or may become pests of commercial fruits currently grown, or being considered for cultivation, in a particular region.
2. Determine the geographical distribution of tephritid species and their hosts.
3. Identify indigenous reservoir hosts of known pest tephritid species.
4. Explore for parasitoids of pest tephritids.
5. Monitor infestation of cultivated fruits.

What to carry with you

The tools that you carry will largely determine the success of your fieldwork. The following items made collecting simple and quick.

1. Hand-held pruner (secateurs).
2. Long-arm pruner with extension poles (**Plate 31**). Pruner heads can sometimes be found in the larger local hardware shops, but they may have to be purchased from abroad (c. USD 50–75). The head is armed with two opposed cutting blades, controlled by a pulling rope. The pruner head has a circular metal fitting that fits over a pole. Normally, you will supply the poles. The pruner head should be permanently fixed with screws to a wooden pole. Wooden broom handles are available locally (and cheaply), and make good poles. Extension poles (for reaching fruits high off the ground) are also



Plate 31. Pruner (background), pruner head (foreground)

made from broom handles. Fix a short steel cylinder to one end, so that each extension pole has a wooden end and an end with a steel cylinder into which the wooden end of the next extension pole fits. In this fashion, when out in the field, the length of the long-arm pruner can be extended to an appropriate height. We have found that up to four (c. 2 m) extensions can be used in the field without becoming too unwieldy. Make extra poles because you will misplace some.

3. Polythene bags for carrying and transporting fruits.
4. Plastic containers. We used rectangular 2-litre white plastic 'ice cream' containers. In Kenya, these are inexpensive and available in the larger general stores. In those cases where you sample extremely large fruits (e.g. jack fruit, *Artocarpus heterophyllus*) you will need to place them in other containers, such as buckets or cardboard boxes.
5. Container covers (these are normally included with the containers at no extra cost), the tops of which have been partially cut away and replaced with fine-mesh fabric or screening. Be sure the mesh gauge is small enough to retain the smaller parasitoids. Prepare the tops in advance. After cutting away a portion of the plastic top (8 x 12 cm or slightly larger is fine), score the *underside* with a dull kitchen knife, making crosshatched lines around the perimeter of the hole, within about 1 cm of it. This provides a surface to which you can glue the mesh fabric. After gluing the mesh to the *underside* of the covers, leave them to air dry for a few days.
6. One or more plant presses.
7. Plant identification manuals and books. In Kenya, Beentje's (1994) *Kenya Trees, Shrubs and Lianas* and Agnew and Agnew's (1994) *Upland Kenya Wildflowers* are essential. Blundell's (1994) *Wildflowers of East Africa* is also useful. Elsewhere, regional guides are available for many regions and some of these are excellent,

as are the more comprehensive flora guides (e.g. *Flora of Tropical East Africa*, etc.) with separate numbers published for each family. Enquire about local names of fruits. They can be useful as a first step in the identification process. However, do not assume that local people know more about plants than you do. Sometimes they do, and sometimes they do not.

8. Bread boxes for carrying items 1, 3, 4, 5, and 7 above.
9. An inexpensive digital camera (3+ megapixels) with macro capabilities (when travelling, keep it on a soft seat or cushion) for making photographic vouchers of collections in the field.
10. GPS receiver.
11. Old foam mattresses to cushion fruits in transit.
12. Extra rope.
13. Machete/cutlass.
14. Old towels or cloths to moisten and cover fruit containers, particularly when working in hot arid areas.
15. Plenty of water for drinking, for the vehicle, and for item 14 above.
16. Blank paper or notebook (Notebooks with waterproof paper are best but are not sold locally), pencils, pens and one small ruler.

Methodology

Field sites

Choosing sites

A field site can be anything from an undisturbed primary forest, to a small orchard of fruit trees in mixed subsistence farmland, to a tree-lined street running alongside an ocean port facility. Depending on the research interests, one person's dream site is another person's waste of time. Obviously, you will not be spending much time in pristine high altitude forest if you are interested in monitoring potential pest-tephritid breeding in fruit trees near a port from which mango growers ship their crop. But you may be very interested in such a site if your task is to document the availability of animal protein (in the form of tephritid and other insect larvae) in the diet of a threatened frugivorous hornbill.

Accessing sites

- (a) Getting permission. One should always request permission before sampling on private property, and, in a more general sense, it is simply polite to announce one's presence in a new area, particularly in the countryside. This serves two purposes. First, reporting to the

local chief's (or other appropriate functionary's) office will eliminate suspicion of the purposes of your work. Second, this allows you to request the services of local people (most productively, local teenagers) who know the area and perhaps, even, where fruits are currently available. (One necessity—even if local people insist that there are no fruits available, you look for them yourself; there will be some, virtually anytime of the year.)

- (b) Sampling in gazetted National Parks and Forests. This requires official permission. In Kenya, the relevant authorities are found at the Kenya Wildlife Service, i.e. the Director of Research and the Conservator of Forests. Prepare a one or two page project outline, including your goals, to justify your request. It is helpful if you state explicitly that you will provide them with the results of your work, in the form of publications or, at the least, a report summarizing your data. Delivering on this promise will create goodwill and facilitate future cooperation with these authorities. If you work within a scientific institute or university, requests should originate from the department (e.g. environmental studies, conservation, ecology) that routinely deals with these authorities.
- (c) Use local youth when exploring for fruits. People are usually intensely interested in what you are doing and willing to help, particularly if you offer some compensation (small or more generous, depending on the means available to your project). They can help with carrying the bags of fruit you hopefully will have collected, but their real value comes in locating and reaching fruits. It was my experience that local people were far superior to me at finding fruits, particularly when these were on trees or lianas high above the ground. They are also immeasurably better at climbing to reach them when they are too high for a long-arm pruner to reach.

Field collections and plant identification

When collecting fruits in the field, sampling strategies depend on several factors. The most important of these are:

1. Fruit availability
2. Fruit accessibility
3. Vehicular capacity
4. Available field and laboratory manpower
5. Laboratory space.

In general, a good rule of collecting is to maximise the quantity and diversity of sampled fruits, i.e. try to return to the rearing facility with a vehicle more or less packed full of fruits. This will increase the probability of finding pest species as well as rare ones. That said; however, logistical

and time constraints may force you to be selective among species of fruit encountered in the field. You may want to spend less time sampling from fruits that, based on previous data from rearing of the same or related fruit species, are not likely to produce fruit flies.

Finding fruits

1. Use binoculars to locate fruits in higher trees, especially at the edge of forests where the view is unobstructed.
2. In forests, if possible, work in teams of two or more. This will improve safety and thoroughness. Maximise coverage by spreading out. Walk in parallel lines, and maintain voice contact so no one becomes lost. (This is yet another good reason to work with local people. You may become lost, but they will not.)
3. Listen for bird and primate chatter, they may lead you to fruits. If using a vehicle, drive along forest tracks or edges.
4. If you have a roof rack, fruit spotters should sit on top of the vehicle.

Collecting fruits

1. Collecting from the ground. You **must verify the source of the fruit**. Assigning a tephritid to an incorrectly determined host is worse than providing no host information at all. This can be difficult, particularly in forests, where a tangle of shrubs, climbers and trees are potential sources. Use your binoculars. Lie on your back on the ground to steady yourself.
2. Collecting from a plant;
 - (a) Use your hand-held pruner or the long-arm pruner with/without extension.
 - (b) While collecting along the side of a road or a track within forest or woodland, if you have a suitably strong vehicle, use it for added reach by climbing on top of the vehicle. This will give you an extra 2 m or so of height.
 - (c) You can also climb the tree.
3. Whenever possible, collect a plant specimen as a voucher for each fruit collection. If a tree is the source of the fruit, but is too high to get a plant specimen, use your binoculars to view its leaves and record as many of their characteristics as possible (see below).

Managing collections in the field

1. Before beginning to collect, write the date at the top of the page on a new page in your field notebook, or on a blank piece of paper. Beneath the date, write the site name. You are now ready to collect.

2. Put one collection of fruits per plastic (polythene) bag. **Never mix or combine different species of fruits**, even if you are short of bags.
3. Make a small collection-note, providing four pieces of data;
 - (a) Plant name. If you do not know it, be as descriptive as you can be (e.g. 'unknown tree', 'woody climber'),
 - (b) Site,
 - (c) Date,
 - (d) Note number. (On any particular date, note numbering starts at 1 and proceeds sequentially. Should more than one site be sampled **on the same date**, note numbering **does not revert** to the beginning [i.e. to number 1], but rather continues to increase sequentially. Only on a new sampling date does note numbering revert to 1.)
4. Place the note inside the polythene bag, on top of the fruits.
5. Keep plastic bags out of direct sunlight. (If possible, **avoid using** black bags.)
6. After making each collection, immediately make detailed notes about it in your field notebook or on the blank sheet of paper. Do not wait until later—you will forget important details.
 - (a) Note number (The same note number that is included in the bag containing the fruit sample).
 - (b) Name of the plant, if known.
 - (c) Type of habitat (e.g. forest, shrubland, urban roadway).
 - (d) GPS coordinates and altitude. (**Note:** In forests, you may not be able to acquire satellite signals. In this case, record GPS data at the nearest clearing or at the forest edge.)
 - (e) Type of plant (e.g. shrub, tree, climber, liana, broad leaved herbaceous plant).
 - (f) Plant characteristics
 - i. Woody or herbaceous, height, presence or absence of thorns and latex, bark colour and texture.
 - ii. Leaf characters (these are usually illustrated in plant books)
 1. Type—simple or compound.
 2. Overall leaf or leaflet shape.
 3. Shape of leaf base and apex.
 4. Hairiness.
 5. Leaf edge characteristics.
 6. Petiole length and characteristics.
 - iii. Fruit characters
 1. Unripe, ripe, rotting.
 2. On ground, or from plant.
 3. Colour when ripe.
 4. Type (e.g. fleshy, pod, capsule).
 5. Shape, size (range), diameter or length and width (if not round).

6. Type of infructescence (When in flower this is called an inflorescence, e.g. cyme, raceme, umbel). These are usually illustrated in plant books.
7. Location of infructescence (axillary, inter-axillary, terminal, on trunk).
8. Pedicel (and peduncle, if present) length and characteristics.

Preparing collection vouchers in the field

1. Pressing plant specimens. For advice on collecting, pressing and preserving plants, visit a herbarium or refer to guides either online or in books. An excellent and free resource is *Herbarium Essentials* (Victor *et al.* 2004), available on request from sabonetpub@nbi.ac.za. They will mail you a copy.
 - (a) For each collection, press at least one plant specimen.
 - (b) Arrange specimens within a single sheet of newspaper. At minimum, the same 4 pieces of information accompanying the fruits (plant name, date, collection location, note number) should also accompany the plant specimen. Write this information on the newspaper.
 - (c) Arrange the specimen so that the important characters of the leaves, e.g. the inflorescence and flowers can be easily seen on examination. Do not include too much material, as this will produce a poor specimen.
2. Field photography (yes, **photographs can make excellent vouchers**)
 - (a) Place the plant specimen and fruits on the ground (soil with leaves, stones, and twigs removed makes an excellent background).
 - (b) Arrange the plant and fruits to best demonstrate important characters.
 - i. Simplicity—shoot an uncluttered image.
 - ii. Include a ruler or pen for scale.
 - iii. Include variation in fruit, e.g. colour, size, shape.
 - iv. Include important plant characters, e.g. leaves, thorns, flowers.
 - (c) Take many photos (some will be better than others; digital images are free). Shoot at different distances and angles to include the plant parts you wish to highlight. Use macro mode for close-ups. **Always** turn off the flash. The flash, particularly in close-ups, usually produces poor images.

Transporting fruits

1. Put one collection per container.
2. Place the polythene bag containing the fruit collection in a large plastic

container. Pull the bag up and over the rim of the container, and then down, lifting the fruits off the bottom of the container (**Plate 32**). Secure the bag in place with the container cover. During transport, this serves to hold the bag and fruits away from the bottom of the container and limits bruising and damage to fruits when driving on rough roads.



Plate 32. Sample container with polythene bag and fruits

3. Use breadboxes to organise collections. Place them on inexpensive foam to cushion fruits during travel.
4. Cover containers with cloth to shield from dust, heat and sun. Moisten cloth if humidity is low.

Processing fruits in the laboratory

1. Each collection is assigned a **unique** project number. Numbers are incremented sequentially (1, 2, 3, and so on.) from the beginning of the project. No number is ever repeated. For example, if you make 2437 separate collections of fruits in your project, the last fruit sample is assigned collection number 2437.
2. Remove leaves and stems completely from a sample. This is important as some insects mine leaves or bore in stems. Galls on leaves and stems can also produce insects. Incorrect processing can yield incorrect results.
3. Fruits from each collection are counted and weighed.
4. In our work, each fruit sample was placed in a 1-litre, rectangular, plastic ice-cream container that had c. 0.5 x 2.5 cm ellipsoid holes cut into the bottom (**Plate 33**). An ellipsoid (but not circular) shape prevented fruits from clogging the holes. A mesh-covered top was fitted over the container.
5. This container was then nested inside a 2-litre, rectangular, plastic container containing moistened sterile sand (**Plate 34**). The holes in the

smaller container allowed mature tephritid larvae and other insects to fall into the larger container below, after exiting host fruits.

6. An adhesive label is affixed to the outside of the large container. On this label, write (in pencil) the same information found on the label accompanying the sample from the field (i.e. plant name, date, location, note number) and, **most importantly, the unique project collection number assigned to the sample in the laboratory.**



Plate 33. One-litre fruit-holding container with ellipsoidal holes



Plate 34. One-litre fruit-holding container nested on 2-litre container

7. Hold fruits for 2–3 months. Spray with water as needed. Avoid spraying fruits that are prone to fungal growth. Most fruits will be dry and shrivelled by this time. Large, moist fruits may be held for longer periods. Dissect and examine them for larvae or puparia before discarding the fruits.
8. In the tropics, fruits may be held under ambient conditions, although it may be necessary to supplement water vapour during dry periods. In our project, we filled several large containers with water to maintain relatively high humidity in the rearing room. Also, containers with fruit samples were arranged on metal shelves, the legs of which were placed in water-filled containers. This supplemented humidity while simultaneously acting as an ant barrier.

Processing reared insects

1. Check daily for emerged insects by opening containers inside a large cage (**Plate 35**). We used a 50 x 35 x 38 cm transparent, Plexiglas (Perspex) cage with a fabric sleeve through which the containers were passed into the cage.
2. Transfer insects (except moths) to a holding cage. We used a 20 x 14.5 x 15 cm cage with one or more mesh sides (**Plate 36**). Flies should be held for 4 or 5 days to set their colours and harden their exoskeleton.

Wasps and beetles can be killed after 1–2 days. Moths should be killed immediately and pinned the same day.

3. Provide insects with a three parts sugar and one part brewer's yeast diet. Small droplets of honey should be dropped onto the roof of the cage and cotton wool soaked with distilled water placed in a small container on the floor of the cage.
4. Process insects by killing them, i.e. by freezing or with an effective and quick acting killing agent (e.g. ethyl acetate) and pin or place them in 80% ethanol (and 95% if you intend to extract DNA from a sample). Provide proper temporary labels until permanent labels are made. When permanent labelling is complete, each specimen should have three labels as follows.
 - (a) The uppermost one should include the country name (in capital letters), the province or region in which the collection was made, the location name, latitude, longitude and altitude, date of the collection, and the name of the collector.
 - (b) The second label should include the name of the plant from which the insect was reared (e.g. 'ex fruit *Coffea arabica*'), the name of the project, and the unique collection number assigned to the fruit sample from which it was reared.
 - (c) The bottom label should include the name of the tephritid (or other insect) species and the name of the person who made the identification, preceded by the abbreviation 'det.' (short for 'determined by').



Plate 35. Large cage for checking emerged insects



Plate 36. Insect (fruit flies) holding cage

How to curate the collection

All the hard work you have done to this point will be of little good if you do not properly curate and label the specimens you have pinned. Specimens should be housed in tightly closed cabinet drawers or insect boxes. Each

box or drawer should have a single ball of naphthalene (moth ball) secured with pins in one corner. Be sure that the mothball is secured or it will damage specimens when boxes or drawers are moved.

Managing the data

1. Create a spreadsheet file
2. Think about which variables to include. This will vary depending on the project. In **Annex 3**, we have provided a sample of the spreadsheet we used in our work.



CHAPTER 6

Handling, Packaging and Shipment of Specimens

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Background

This chapter has been written primarily to serve as a general reference and is not entirely exhaustive. It is written to provide a broader understanding of how specimens are prepared, handled and shipped for identification, to ensure that they are properly managed and that consistent standards are adhered to.

Tools and implements

- A simple dissection microscope (with sufficient lighting)
- Forceps for fly handling. These could be:
 - Lightweight forceps
 - Fine-tipped 'stock bill' forceps for handling unmounted dry specimens
 - Blunt-nosed 'featherweight' forceps for handling larvae
 - Pinning forceps for handling pinned insects
 - Watchmaker's forceps (with fine hard tips). Care must be taken not to drop forceps with fine hard tips as they will bend and not ensure a proper grip.
- Fine (camel hair) brushes
- Ethanol (ethyl alcohol) in squeeze/wash bottles—70% or absolute for dilution
- Pencils (HB) and erasers
- Pair of scissors
- Cavity dishes
- Entomological pins (stainless steel)
- Setting needles (or box of office pins)
- Marker pens
- Masking tape
- Cello tape
- Soft packing materials such as:
 1. Styrofoam or polystyrene in the following forms:
 - Loose chippings
 - Solid block

- Solid flat, and
- Box.
- 2. Shredded office paper in the following forms:
 - Single-shredded
 - Double-shredded
- 3. Bubble-air plastics
- 4. Plastic air-bags
- 5. Cotton wool
- 6. Direct plastic wrapping
- 7. Fine wood shavings
- 8. Newspaper wrapping
- 9. Used shipping material.

Collection of information and labelling of data

A high standard of preparation and documentation is essential for insect collection as it is an indication of its scientific value. Documentation usually depends on the accuracy and details of the collection information and therefore, the scientific value of the collection declines with limited or poor documentation.

Some of the primary information collected that should appear on vials and packaging materials is:

- Country/province or region
- District/locality:
- GPS reading (if possible)
- Date
- Collector
- Method of collection
- Trap number
- Habitat/crop
- Any other collection information or ecological observation from the field.

Remember to keep back-ups of your collection information when shipping specimens.

Note:

The most common mistakes from collection data usually stem from the method of collection and the habitat/crop information. It is not enough to state that the method of collection was 'by trapping': The trap type and lure/attractant must be included. 'Mango' may mean 'from mango orchard' or 'from mango fruit'. If insects are reared from fruits, it should be categorically stated or written as 'ex. fruit'. This is the only way host range data is collected

(i.e. rearing insects from incubated fruits). If they were collected on a fruit, 'on fruit' should be written. It is also useful to add the activity (if possible) at the time of collection e.g. 'resting on lower leaf surface', 'mating on fruit or leaf', 'hovering around fruit or lure container'.

Preparation of specimens

On arrival from the field, it is usually tempting to leave your material in the open in the laboratory and return to them the next day. It is advisable to keep them in the right place, e.g. in the cold room, freezer or neatly arranged. Specimens may get deformed, shrink or rot if they are not immediately attended to. This also ensures that any unwanted material from the field will be noticed and disposed of before they go into hiding in the lab.

Here are some guidelines:

- Field-collected specimens should be sorted out into different taxonomic groups and counted.
- Field collection data, coded labels, etc. should be written out in full (in pencil or in permanent ink) on arrival in the laboratory and stored with the specimens.
- Use clean empty vials.
- To collect dry specimens, use fine camel hairbrush or soft forceps.
- For wet or liquid lure traps, strain the insects or flies through fine mesh or sieve.
- Use one vial per trap. If a vial is full, duplicate the label using the same trap number and fasten the vials together.
- Add 70% ethanol for preservation. For long-term storage, it is advisable to increase the concentration by adding 75% ethanol to cater for losses due to evaporation and dilution by body fluids of insects, especially if in large numbers.
- For DNA studies, store specimens in 95% ethanol in a deep freezer.
- Live insect specimens to be stored in ethanol can be killed by placing them directly into 70–90% ethanol, while those to be pinned can be killed with ethyl acetate vapour in a 'killing jar'.
- The easiest way to kill insects without chemicals is to place them in an airtight container and deep freeze.

Dry specimen mounting

Dry specimens are particularly fragile and should be handled with great care, especially after pinning. Use a camel hairbrush or soft forceps to collect dry specimens. Dry specimens should not be left uncovered when you are not handling them.

Pin mounting

Direct/single mounting

- Pins must be made of stainless steel. If not, they will corrode and damage specimens.
- Drive the pin through the insect up to 3/4 of the length and leave enough room above the specimen for gripping.
- Use a size 3 entomological pin where possible. The finer sizes 0, 00, 000, 1 or 2 and minuten pins are used for very tiny specimens, e.g. parasitic Hymenoptera.
- Ensure that the legs are not obscured and the antennae are visible.

Double mounting

This involves the use of minuten or micro pins and mounting strips. Minuten pins (number 0.15) are used to pin the smaller specimens either from the side or back (through the thorax) about 2/3 the length. A size 3 entomological pin is passed through one end of a piece of mounting strip or Plastazote® Foam (from polyethylene enclosed-cell foam plastic), and the specimen on the minuten mounted on the strip (~18 x 4 x 5 mm). This method is used for specimens that are too small (under 4 mm) and fragile to have entomological pins pass through them.

Card mounting

This involves the use of special 3-ply card points (Bristol or Ivory Board) cut from a punch, pins and insect-mounting glue. The cards are thin enough, but do not curl when pushing a pin through. This is how card mounting is done.

- Push the pin through the card at the broader end.
- Bend the pointed tip of the card downwards with a hard pair of forceps (at right angles).
- Smear a small drop of glue on the curved tip.
- Place the specimen on the back with the head to the left.
- Invert the pin and card (with the curved tip pointing upwards).
- Place specimens with wings folded backwards on the left side.
- Press the glued tip against the side of the specimen. There must be no obstruction on any side (top, bottom or other side of the specimen. So that characteristic features obscured by the card and glue on one side can be observed on the other side).
- Align the specimen properly with the forceps and add labels as appropriate.

A second method of card mounting is employed for specimens that are too tiny to stick to the tip of pointed cards. In this method, the cards are rectangular and the specimens (up to four) are glued to the upper surface near one end of the card.

Note:

- Smaller specimens should be mounted using a dissecting microscope.
- If specimens are too brittle and pinning is not possible, collect specimens in fine netting material and place them between 2 layers of cotton wool in a box and seal tightly.
- Any unmounted smaller specimens can be collected in gelatin capsules and stored.
- Add camphor balls during storage to prevent psocids and other insects from destroying them.
- Water-soluble glues are recommended, to allow for removing specimens for future study.

Relaxing stored dry specimens

Freshly killed insects need no preparation before handling but those that have been stored dry, i.e. layered between tissue paper, must be relaxed in a moisture chamber or 'insect relaxer' before handling.

For relaxing dry specimens before pinning do the following:

- Use plastic or airtight glass container.
- Cover the bottom with wet cotton wool.
- Add a few drops of phenol or chlorocresole crystals to prevent growth of mould.
- Place a grille or wire mesh on the wet cotton wool.
- Add another layer of dry cotton wool on the grille.
- Place the dry specimens in a Petri dish on the dry cotton wool in the container.
- Spray inside part of the airtight lid with a little water (avoid dripping water onto the specimens).
- Replace the lid and leave the specimens for a few days until soft enough to handle.

Note:

Specimens should be checked often to avoid rot or discolouration. Labels in the chamber **must** be written in pencil.

Preparing wet specimens in ethanol

This method is used for soft-bodied insects and larvae. It is also used for storing large numbers of one species collected from the same locality.

Specimens kept in ethanol must not be allowed to dry out. If samples in an open container are to be left for a while, they should be covered and the microscope lamp switched off. When removing specimens from vials, remove those stuck to the sides by rinsing out with a squeeze bottle of ethanol or with a fine brush. Do not pull out with forceps!

Preparing adult flies

- Use clean empty vials.
- Use one vial per trap. (If a vial is full, duplicate the label and use the same trap number.)
- Write collection information on the label in pencil and place inside the vial (not stuck outside the vial).
- Always preserve in 75% ethanol (75 ml absolute ethanol and 25 ml water).
- Use wide-mouthed vials to facilitate specimen removal for examination.
- Tight-fitting caps will prevent ethanol leakage.
- For collections of up to 10 specimens, mount all of them.
- For 10–50 specimens, mount the first 10 and then half of the remainder
- For more than 50 specimens, mount 30.
- After mounting, include labels stating 'duplicate specimens in alcohol' to the first 10 specimens, and 'duplicate specimens mounted' to alcohol-preserved specimens.

Preparing larval stages

- Heat water to near boiling point (just off the boil) and remove from heat source.
- Dip live larvae in hot water for 5 to 10 seconds, making sure not to 'cook' larvae.
- Remove larvae and store in 75% ethanol.
- Add a few drops of glycerine to alcohol (to prevent rotting).

Packing, packaging and shipment

The purpose of mounting specimens is to get materials to the final destination; (1) in good time by courier service or registered mail (not ordinary post), (2) safely with sufficient addressing and precise content declaration, and (3) intact and in good condition to enable identification.

Wet or ethanol-preserved specimens

- Use small screw cap vials.
- Too much space between the level of alcohol and the lid will cause a 'local storm' in the vial and destroy the specimens. If this happens, push cotton wool inside and place specimens on top.
- Tape vials together in reasonable numbers (4–10) depending on size (Figure 20A).

Dry or pinned specimens

Pack dry or pinned specimens in small strong boxes with Styrofoam-layered bottoms. If a Styrofoam bottom does not fit tightly, drive office pins through the box at the lower part from the four sides to hold the Styrofoam in place.

Each specimen (with all necessary labels) should be pinned with enough room to prevent them from touching each other.

For specimens with big abdomens, long legs or fragile antenna, entomological pins should be used by pinning a 'cross' beneath them for support.

Place one ball of camphor (in a camphor box or wrapped in a netting material) in a corner and fasten hard to prevent movement and destruction of the specimens.

Slide-mounted specimens (for parasitoids/hyperparasitoids) which may be reared from fruits

Because slide-mounted specimens are usually tiny, any slight movement or handling of the cover slip may result in destroying or distorting the specimen. For this reason, slide mounts are usually shipped in special grooved boxes to keep them in place and separate them from one another. Hold slides in place with masking tape at the edges before closing the top. This prevents slides from slipping out accidentally when the package is opened.

Slides are packed with the upper surface facing the same upward direction. Cover slips are likely to slide off or away from specimens when temperatures in the package become too hot and slides are facing downwards. Therefore, the direction of slides **MUST** always be indicated on the package.

After specimen preparation (dry, wet or slide-mounted)

- Pack in a small box with bubble packing material or Styrofoam (Figure 20B and C).
- Seal the small box and pack again in a stronger cardboard box (Figure 20C and D).
- Place additional typed collection data on small box, add more packing material and seal (Figure 20D–F)

- Provide the recipient's full name and mailing address (including telephone, fax, e-mail) on at least two sides (**Figure 20G**),

For example:

TO:

DR S. K. RONNIE-HALLIB
DEPARTMENT OF ENTOMOLOGY
FRUIT FLY RESEARCH LABORATORY
2531 BACTROCERA AVENUE
P.O. BOX 3131 – 00001
NAIROBI – KENYA

TEL: +254-20-777666
FAX: +254-20-777555
CELL: +254-721-999333
E-mail: FFRL@GOODTAXONOMY.COM

- Write the sender's full name and address as above.
- Provide exact content declaration and purpose of mailing (for customs inspectors/port authorities).

For example:

FRAGILE!

DRY INSECT SPECIMENS FOR SCIENTIFIC RESEARCH—NO COMMERCIAL VALUE

**DEAD INSECT SPECIMENS IN 70% ALCOHOL FOR SCIENTIFIC RESEARCH—
NO COMMERCIAL VALUE**

- After packing, conceal all glaring previous written material on the shipment box to avoid confusing port authorities. Only labels of the present content and addresses should be visible and clearly displayed (**Figure 20G**).
- Indicate any handling instructions e.g. 'FRAGILE', 'DO NOT SHAKE', 'THIS SIDE UP' or with an upward-pointing arrow '↑'.
- Send specimens by registered mail or Courier service (NOT by ordinary mail or post).
- Registration and sufficient addressing are essential for tracing items lost in transit.
- Since materials are always sent by Courier service, the airway bills or registration numbers should be sent by e-mail or fax to the recipient to facilitate tracking of the shipment.

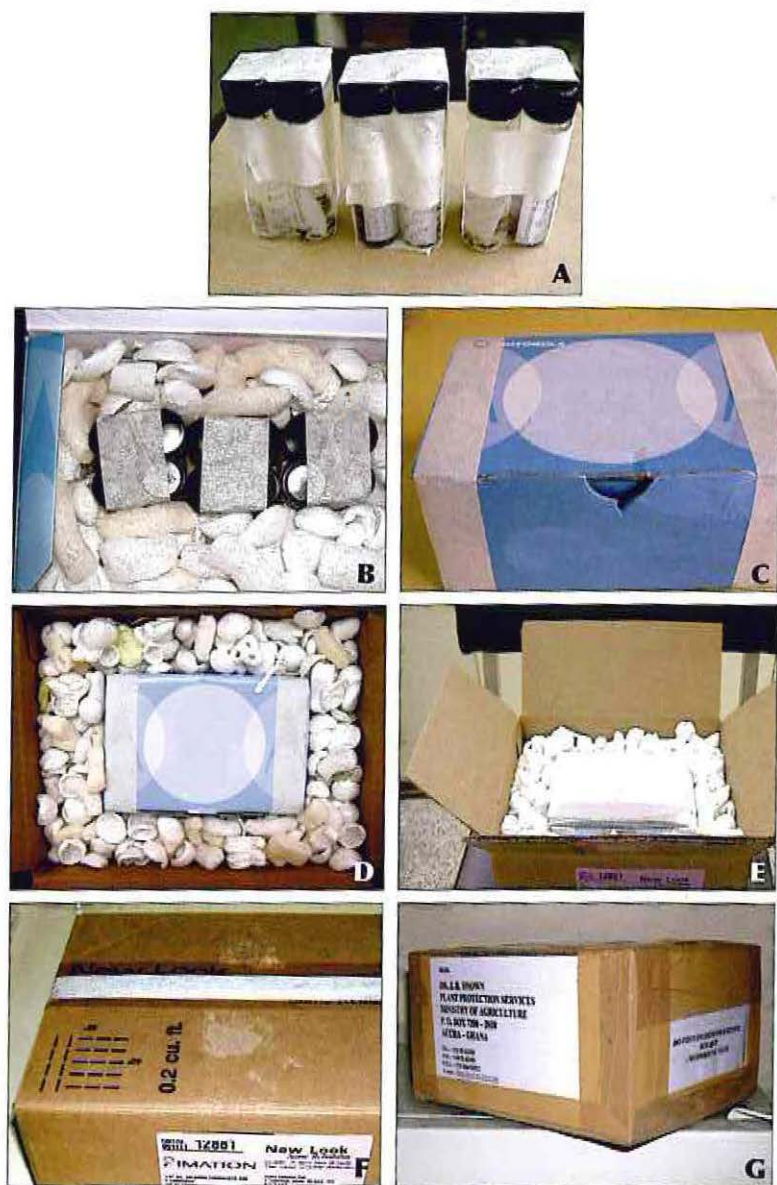


Figure 20. Steps involved in the proper packing, packaging and shipment of specimens for identification. **A**, Small sizeable vials taped together for easy packing; **B**, taped vials packed in box with packing material and properly sealed; **C**, **D** and **E**, small box packed in a second one with packing material and a copy of the collection data sheet (**E**); **F** and **G**, second cardboard box completely sealed (**F**) with sufficient addressing and full content declaration (**G**).

Note:

There are no hard and fast rules or specifications in terms of materials used in the packing, packaging and shipment of specimens. They are all based on the three principal aims of shipment: getting the specimens to the final destination in good time, safely and in good condition. To achieve these aims, individual creativity, originality and ingenuity prominently come to the fore. Any type of strong cardboard box can be used for shipment, depending on the number of specimens to be shipped.

Labelling specimens

Because labels must last as long as the specimens, it is important that great care is taken in preparing them.

- Legibility: If labels are handwritten they should be small and legible.
- For dry specimens, paper size should be 12 x 8 mm. For specimens in ethanol, paper size can be up to 35 x 12 mm, depending on size of the vial.
- Use scientific names for permanent labels.
- Use drawing pen with fine nib (0.18) or computer-generated labels with appropriate font type and size (laser print or better).
- Care should be taken not to alter field data during writing, e.g. *cosyra* and *cosyrae*. The former is a tephritid fruit fly species (Diptera), while the latter is a braconid parasitoid (Hymenoptera).

Labels for dry specimens

- Three labels are usually used for:
 - Locality information,
 - Host/trapping information
 - Identity information (insect and determiner). For example: *Bactrocera invadens*, Det: M. Billah

Use lasting adhesives that will not dry and peel off after a few weeks. Pass the pin through the middle of the label for direct/single mounted specimens and near the edge of the label for card or double-mounted specimens.

Labels for wet specimens

Because the labels for wet specimens are going to be placed in a preservative (ethanol) and for a very long time, the two most important criteria are the quality of the paper and colourfastness of the ink. The sequence of information is the same as for pinned specimens, but can be written on

one label (as it is considerably larger). When some of the specimens are mounted, indicate 'duplicate specimens mounted' on the specimen label or on an additional label and place it in the specimen container.

- Good quality paper (with a strong and smooth surface) should be used. Poor quality paper tends to 'dissolve' with time.
- Some ink may run in ethanol. Therefore, the use of durable ink (black, waterproof, quick-drying ink) is recommended.
- For printed or written labels, allow 5 minutes drying time before placing in alcohol.
- Lettering with HB pencil on good quality paper may also last for long.
- The labels should be placed inside the vial—not stuck outside the vial, with the lettering against the wall of the vial (so that it can be read without disturbing the content).
- Avoid placing folded labels in vials with specimens—they may destroy or hide specimens during removal for examination.

Labels for slide specimens

Slide labels (usually two) are placed on either side of the specimen on the slide. The first or left label usually carries the identification data, while the second or right one carries the collection information.

Specimen storage

Wet collection

- For long-term storage, use 75% alcohol to cater for losses due to evaporation.
- Once in a while (at 6–12 month intervals), inspect your material to make sure the alcohol is not completely evaporated. If so, top up.
- Keep specimens away from direct sunlight. They should be stored in a cool dark room under lock and key.

Dry collection

- Pin in airtight insect boxes and mount in drawers in cabinets.
- Add naphthalene or camphor balls to keep away other insects.
- The collection room **must** be free of moisture and dust.
- Movement to and from the collection room must be highly restricted.

Slide collection

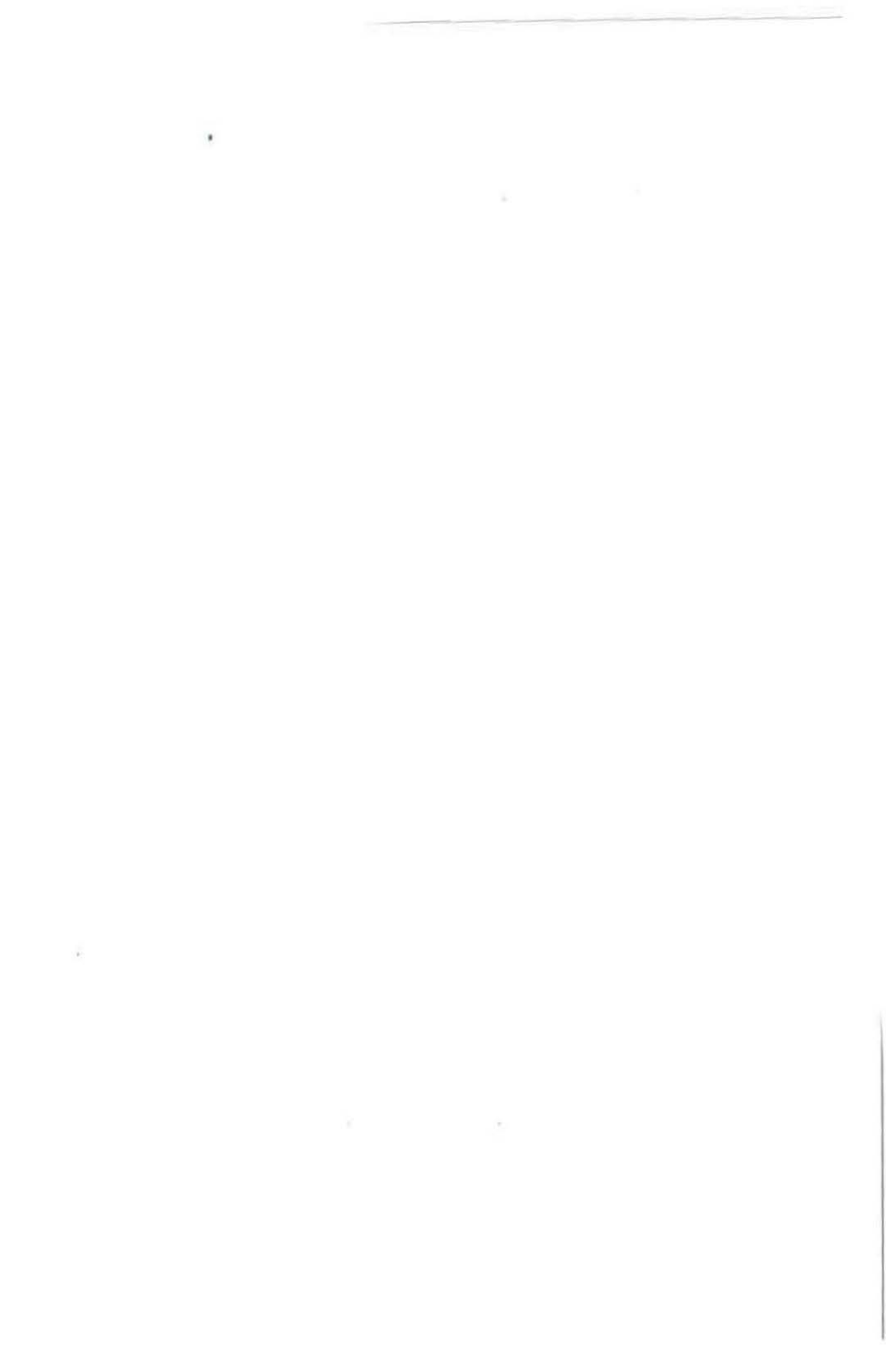
- This method is used for microscopic/very small insects or parts of insects for close examination under the microscope.
- Glass slides are usually 76 x 25 mm and 0.8 or 1.0 mm thick, with ground edges.
- Cavity slides—standard slides with one or two shallow depressions in the middle (for larger/bulky specimens/parts which cannot be accommodated under normal coverslips).
- Place a drop of mounting medium on the slide, carefully arrange specimen/parts in the medium and gently lower a coverslip over the specimen and medium.
- For permanent slides, use mountants such as Canada balsam.
- Slides should be dried in an oven at 35–40° C for 3–5 weeks.
- Store in slide boxes and keep away from direct sunlight and high temperatures.

Things to note

- Do NOT surprise your specialists! Always send a prior notification by mail to inform them about your intention to ship materials for identification. They may be away or too busy at the time.
- Explain the reasons for identification, e.g. for research, survey or thesis, and when the specimens are likely to be sent.
- Indicate the approximate number of specimens, the taxonomic group(s) involved (so that if the insects are not in their field, they can refer you elsewhere), the stages involved (adults or immatures) and the level of identification required (e.g. to species, genus or family level).
- For identifications in major projects, seek cooperation at the planning stage. If not, it is unlikely your request for mass identifications will be treated sympathetically because of other commitments.
- Poorly prepared specimens add up unnecessary 'non-identification' technical work to the specialist. He has more to do than sorting insects! Poorly mounted or damaged specimens are time-consuming to examine, and often cannot be identified.
- Full data labels and any other ecological information must be added to the specimens. Field labels or coded labels are not adequate.
- Keep a contact list of all the people you deal with (with full physical and postal addresses).
- Always indicate where your specimens were identified, and fully acknowledge this in your reports and publications. It adds authenticity to your work. This is how it is done: "Specimens were sent to I. M. White (Natural History Museum, UK), M. De Meyer (Royal Museum of Central

Africa, Tervuren, Belgium), M. W. Mansell (S.A.), R. A. Wharton (Texas A&M University, USA) or M. Billah (AFFP-icipe, Kenya) for identification or confirmation."

- Indicate where voucher specimens of your studied/experimental material have been placed (usually in recognised institutions, e.g. museums). This serves as your natural back up and independent source for future reference and verification.
- Once in a while, inspect your stored materials and remind yourself of the sources of the materials. These are occasions when name changes, evaporated alcohol or vapourised camphor balls changes can be made.



CHAPTER 7

Fruit Fly Taxonomy and Identification

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Introduction

The family Tephritidae includes about 4000 species in 500 genera. It is one of the largest families of Diptera (the flies), and also one of the most economically important groups of insects. The larvae of many species develop in the seed-bearing organs of plants—hence the name ‘fruit flies’. About 35% of species attack soft fruits including a wide variety of crops, while 40% of species develop in the flowers of Asteraceae (Compositae). Larvae of the remainder invade flowers of other species or mine in leaves, stems or roots of plants. Several species are also beneficial, and used as biological control agents of weeds.

Fruit flies are of great economic importance for many reasons, including;

- Fruit pest tephritids occur in almost all fruit and vegetable-growing areas of the world.
- They attack commercially produced fruits and vegetables.
- As larvae of pest species, they develop inside fruits making their control particularly difficult.
- Several species have extended ranges into new areas, and continue to expand, especially in Africa.
- Expensive quarantine restrictions consequently have to be imposed to limit further spread.
- Such quarantine regulations by importing countries can either deny producing countries potential markets or force them to implement expensive disinfestation treatments.
- Fruit flies compete with humans for food resources and have a significant negative impact on sustainable rural livelihoods.

Most attention has been focused on the medfly, *Ceratitis (Ceratitis) capitata* (Wiedemann), but there are at least 20 species of Tephritidae that are currently of economic significance in Africa. Of particular concern are four *Bactrocera* species, which have recently invaded the continent. The

most important species in Africa from an economic perspective are treated below.

Fruit flies of major economic importance in Africa

Indigenous species

- *Ceratitis (Ceratitis) capitata* (Wiedemann)—Mediterranean fruit fly
- *Ceratitis (Pardalaspis) ditissima* (Munro)
- *Ceratitis (Pardalaspis) punctata* (Wiedemann)—Cocoa fruit fly
- *Ceratitis (Pardalaspis) breinii* Guerin-Meneville
- *Ceratitis (Pterandrus) rosa* Karsch—Natal fruit fly
- *Ceratitis (Pterandrus) fasciventris* Bezzi
- *Ceratitis (Pterandrus) anonae* Graham
- *Ceratitis (Pterandrus) colae* Silvestri
- *Ceratitis (Ceratalaspis) cosyra* (Walker)—Marula fruit fly
- *Ceratitis (Ceratalaspis) quinaria* (Bezzi)—Five-spotted fruit fly
- *Ceratitis (Ceratalaspis) silvestrii* Bezzi
- *Dacus (Dacus) bivittatus* (Bigot)—Pumpkin fly
- *Dacus (Dacus) punctatifrons* Karsch
- *Dacus (Didacus) ciliatus* Loew—Lesser pumpkin fly
- *Dacus (Didacus) vertebratus* Bezzi—Jointed pumpkin fly
- *Dacus (Didacus) frontalis* Becker
- *Dacus (Didacus) lounsburyi* Coquillett
- *Trirhithrum nigerrimum* (Bezzi)
- *Trirhithrum coffeae* Bezzi—Coffee fly
- *Bactrocera (Daculus) oleae* (Gmelin)—Olive fly

Invasive species

- *Bactrocera (Zeugodacus) cucurbitae* (Coquillett)—Melon fly
- *Bactrocera (Bactrocera) invadens* Drew, Tsuruta & White
- *Bactrocera (Bactrocera) latifrons* (Hendel)—Solanum fruit fly
- *Bactrocera (Bactrocera) zonata* (Saunders)—Peach fruit fly

Closely related and morphologically similar species to B. invadens (as potential invasive pests)

- *Bactrocera (Bactrocera) dorsalis* (Hendel)—Oriental fruit fly
- *Bactrocera (Bactrocera) kandiensis* Drew & Hancock
- *Bactrocera (Bactrocera) correcta* (Bezzi)—Guava fruit fly

NB.

The following is a pictorial key to the common fruit fly species listed above. It is oversimplified, not exhaustive and meant for all those dealing with fruit flies most frequently encountered in agriculture. More detailed and in-depth discussions, identification and species distribution in the world can be found in White and Elson-Harris (1992), De Meyer (1996, 1998, 2001a, b), De Meyer *et al.* (2002a, b), De Meyer and White (2004), De Meyer and Freidberg (2006), White (2006), and De Meyer *et al.* (2007). For names of veins, thoracic sclerites and setae please refer to White and Elson-Harris (1992) (pp. 31–32).

Key to the common fruit fly species

- A. Sub-costal vein Sc bends at a 90° angle towards costa on 3rd break (sub-costal break). Dorsal side of radial vein R_1 with setulae. Wing cell (*bcm*) with acute extension (known as *cup* extension). Wing usually patterned with coloured bands (See **Figures 21A and 29**)..(**Tephritidae**)..... **B.**

Sc vein bends gradually towards costal vein, not ending in a 90° angle on 3rd break. Dorsal side of vein R_1 without setulae and wing cell without any acute extension.....**Non-Tephritidae.**

- B. Scutellum with yellow and black areas (i.e. yellow 'wavy' band across base as in **Figure 21B**). Presence of isolated preapical cross band (on dm-cu). Basal cells of wing (*c*, *br*, *bm*, *cup*), usually with spot and fleck-shaped marks, giving the wing a reticulate appearance **Ceratitis species.....A.**

Scutellum yellow, yellow and brown, black or white; preapical crossband absent, or not isolated. Basal cells of wing with consistent colour, no reticulate appearance..... **Non-Ceratitis species.....B.**

A. *Ceratitis* species

1. Wing with apex of vein M not covered by diagonal coloured band. Yellow 'wavy' band runs **only** across base of scutellum, posterior half of scutellum uniformly black. Male anterior pair of orbital setae **black and 'kite-like'** (See **Figures 21A, B and D**)..... **C. capitata.**

Males and females can be separated from most other species by the apical half of the scutellum being entirely black and the characteristic wing pattern. *Ceratitis capitata* attacks a vast variety of cultivated and wild hosts, making it the most devastating of all fruit pests. Originally indigenous to Africa, it has spread to many other parts of the world. It is attracted to Trimedlure and terpinyl acetate.

Veins M may or may not be covered by diagonal coloured band. Scutellum yellow, with discrete black spots (**Figure 21C**). Male anterior orbital setae present or absent. If present, **not 'kite-like'** as in **Figure 21D** **2.**

2. Scutellum with **3 dark spots** (see **Figures 21C, 21B, 23B and 25C**). Wing banding brown to black, with a small **break or gap in the costal band** between the costal break and R_1 , or across R_1 (**Figure 24B**) 3.
Wing banding more yellowish, with **no break or gap in costal band** (see **Figures 25D, 26D and 27D**). Scutellum with 3 or 5 dark spots 8.
3. Male with thick feathering on mid leg 4.
Male with no feathering on **mid leg** 7.
4. Male with thick feathering on both **mid tibiae and femora** 5.
Male with thick feathering restricted **only to mid tibiae** 6.
5. Mid femora feathering along most of the inner edge of femur, with **no gap or interruption** in the feathering (see **Figure 22B and C**)
..... **C. ananae** (**Figure 22 A-D**).

This species is recognised by the three black areas on the apical half of the scutellum and by the male having broad feathering along the mid-tibia and on the mid-femur. Females are virtually impossible to distinguish from those of *C. rosa* and *C. fasciventris*.

Mid femora feathering **with slight interruption or gap** in the middle, along the inner edge (cf. *C. ananae*) **C. colae**.

6. **Very thick mid tibial feathering**, covering **about two-thirds** total length of tibia from apical end, with **very dark** central area between rows of feathering. Central dark area with **oblique border marking** (**Figures 23C and D**). Mid tibia **tapers gradually** towards basal end. **Mid femur without stout ventral setae**, fore femur with a few strong setae but not as dense as in mid tibia, and very few anterior setae (**Figure 23D**)
..... **C. rosa** (**Figure 23 A-D**).

This species is recognised by the three black areas in the apical half of the scutellum and by the male having feathering on the mid tibia, but not on the mid-femur. Females are virtually impossible to distinguish from those of *C. ananae* and *C. fasciventris*. *Ceratitis rosa* is attracted to Trimedlure and terpinyl acetate.

Feathering covers **about one-third** total length of mid tibia, and restricted **only to apical part** (**Figure 24C**). Space between feathering of mid leg paler, with no oblique border marking (than in *C. rosa*), and tapers sharply to about half the thickness at middle or apical end (**Figure 24C and D**) **C. fasciventris** (**Figure 24 A-D**).

This species is very similar to *Ceratitis rosa*, which it replaces in the western parts of Central Africa. The ranges of the two species apparently overlap, with *C. rosa* being confined mainly to the eastern coastal areas of Kenya and southwards to South Africa where it is widespread and common. Only recently separated from *C. rosa*. Therefore host records likely to be within the same range as *C.*

rosa. Females are virtually impossible to distinguish from those of *C. rosa* and *C. anonae*.

7. Male face **completely dark red**, with silver lining along lower mouth margin (**Figure 26C**). Scutum greyish-brown, with three poorly defined darker stripes. **Anterior border dark brown, extending along lateral margins giving it a sickle-shape in males (Figure 26B)**. Brown part of mesonotum with dark hairs. **Post-pronotal lobe paler than rest of scutum**. Scutellum yellow with 3 apical black markings, and two small dark spots at the base. Femora with darker streaks. **Hind femur with dorsal hairs dark apically**. Females with face wholly yellow and sometimes with scutellum basally more whitish
..... ***C. ditissima* (Figure 26 A–D).**

Scutum dull brown to dark (**Figure 27B**). **Post-pronotum same colour as mesonotum**. Wings with characteristic pattern of yellow bands. **Front femur with posterior row of dark setae**. Scutellum with 3 dark apical spots. Dark abdominal transverse bands interrupted, giving it a punctuated appearance (with clearly-defined spots) (**Figure 27A**)
..... ***C. punctata* (Figure 27 A–D).**

C. ditissima is the second most important species in citrus orchards in West Africa. A casual glance at the two species, especially the abdominal pattern gives an impression of the same species. Care must be taken to observe colouration of post-pronotal lobes, femora and scutum for slight differences. Availability of males may make it easier. Males of both species attracted to methyl eugenol and terpinyl acetate.

8. Anterior of transverse suture **without dark spots**. Post-pronotal lobe without black spot **9.**
Anterior of transverse suture with **dark markings along lateral margins**. Dark spots around prescutellar acrostichal setae present. Post-pronotal lobe with dark spot **11.**

9. Body pale brown or yellow (**Figure 28A**). **Wing banding yellow-brown**. Male scutum uniformly pale; face pale yellow-white, with darker yellow transverse band halfway between antennal implant and mouth margin (**Figure 28B**). Dorsal side of scutum with no dark markings. **Scutellum with 3 dark spots and a dark patch on the lateral margin of the scutum**, at the position of the posterior supra-alar seta. Fore femur with a few strong setae (6–8) in a single roll along the inner surface
..... ***C. breinii* (Figure 28 A–D).**

This species looks relatively larger than *C. quinaria* and *C. silvestrii*. It is mostly recorded from mango and other associated fruits of that family in western Africa. It is attracted to methyl eugenol.

Scutum predominantly yellow or pale brown, with **reduced dark markings** **10.**

10. No dark markings, except for **2 small black spots near transverse suture** (between upper and lower parts of scutum), and 2 brown spots in the lower half of scutum (in which the dorso-central setae are situated) (**Figure 29A**). Scutellum yellow, with **five small black spots** along margin ***C. quinaria* (Figure 29A).**

The presence of five separate black spots on the scutellum is characteristic for the species. It is close to and overlaps with *C. silvestrii*, but displays a larger distribution being recorded from various countries of sub-Saharan Africa. Males are attracted to terpinyl acetate, but not Trimedlure or methyl eugenol.

Scutum predominantly greyish, no dark spots on anterior part of transverse suture (**Figure 29B**). Dark spots around prescutellar acrostichal setae lacking, and **no dark spot on post-pronotal lobe. Scutellum with 3 dark spots** ***C. silvestrii* (Figure 29B).**

Ceratitis silvestrii largely resembles *C. quinaria*, except that it has only three spots on the scutellum, rather than five. It is only found in western Africa, from Senegal to Nigeria. It has been trapped regularly in terpinyl acetate traps, and has been reared from mangoes as well as some indigenous fruits.

11. Scutum predominantly yellow or pale brown. Post-pronotal lobe with dark spot. Pattern of black spots along entire thorax (**Figure 25C**). **Fore femur yellow on both sides**, and in both sexes. Female with sharp and pointed aculeus. Post-pronotal spot **relatively large**, with seta situated **anteriorly** (**Figure 25B**). Costal band continuous (no gap) (**Figure 25D**) ***C. cosyra* (Figure 25 A–D).**

Ceratitis cosyra has three black areas on the apical half of the scutellum, the male orbital setae are not expanded, and tibiae are not feathered. It is also recognised by the four black spots on either side of the thorax and the four black spots on the dorsal surface of the thorax. *Ceratitis cosyra* is attracted to terpinyl acetate, but not trimedlure or methyl eugenol.

Mesonotal supra-alar spots at least **partly or completely divided longitudinally**. Basal spots of scutellum with darker yellow colouration. **Females with aculeus tip bilobed**. Post-pronotal **spot small**, with seta situated **almost in the centre** (non-mango pest) ***C. discussa*.**

A casual glance of this species tells it is *C. cosyra*, until the post pronotal lobe and the tip of the aculeus of females are closely observed.

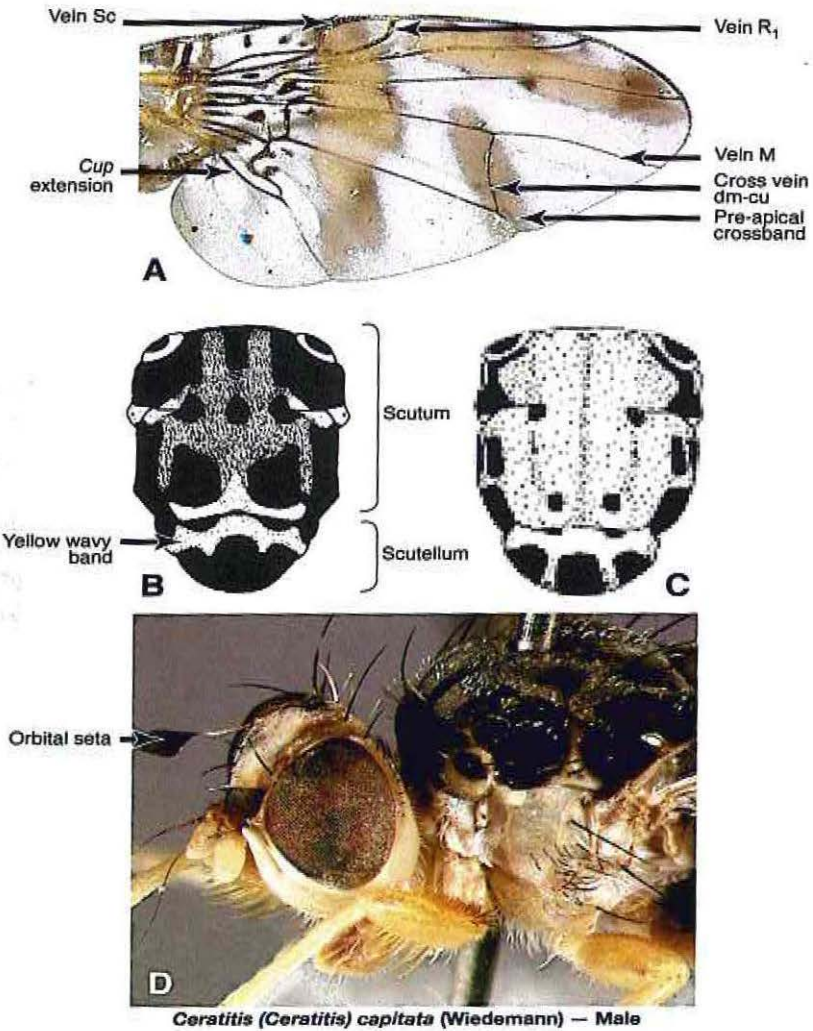


Figure 21. (A) Forewing; (B) thoracic colour pattern and (D) head showing the male orbital setae of *Ceratitis capitata* (Wiedemann) (the Mediterranean fruit fly/med fly); C, thoracic colour pattern of *Ceratitis cosyra*

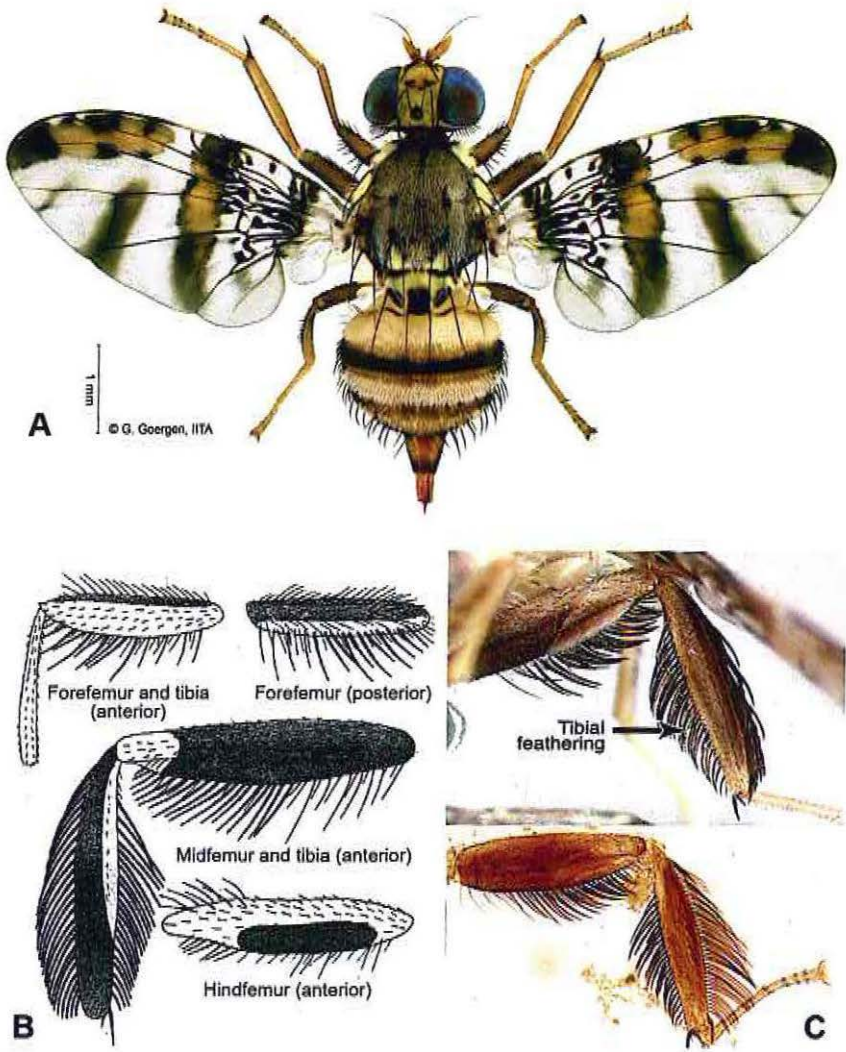
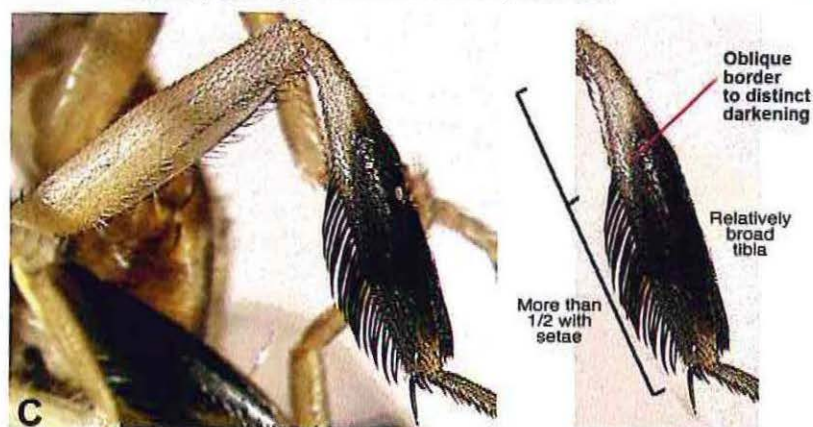


Figure 22. (A) General habitus, (B and C) mid leg feathering of *Ceratitis anonae* Graham



Ceratitis (Pterandus) rosa Karsch – female (©NHM 2000)



D

Ceratitis (Pterandus) rosa Karsch

Figure 23. (A) Head, (B) thorax and (C, D) mid leg feathering of *Ceratitis rosa* Karsch (Natal fruit fly/Natal fly)

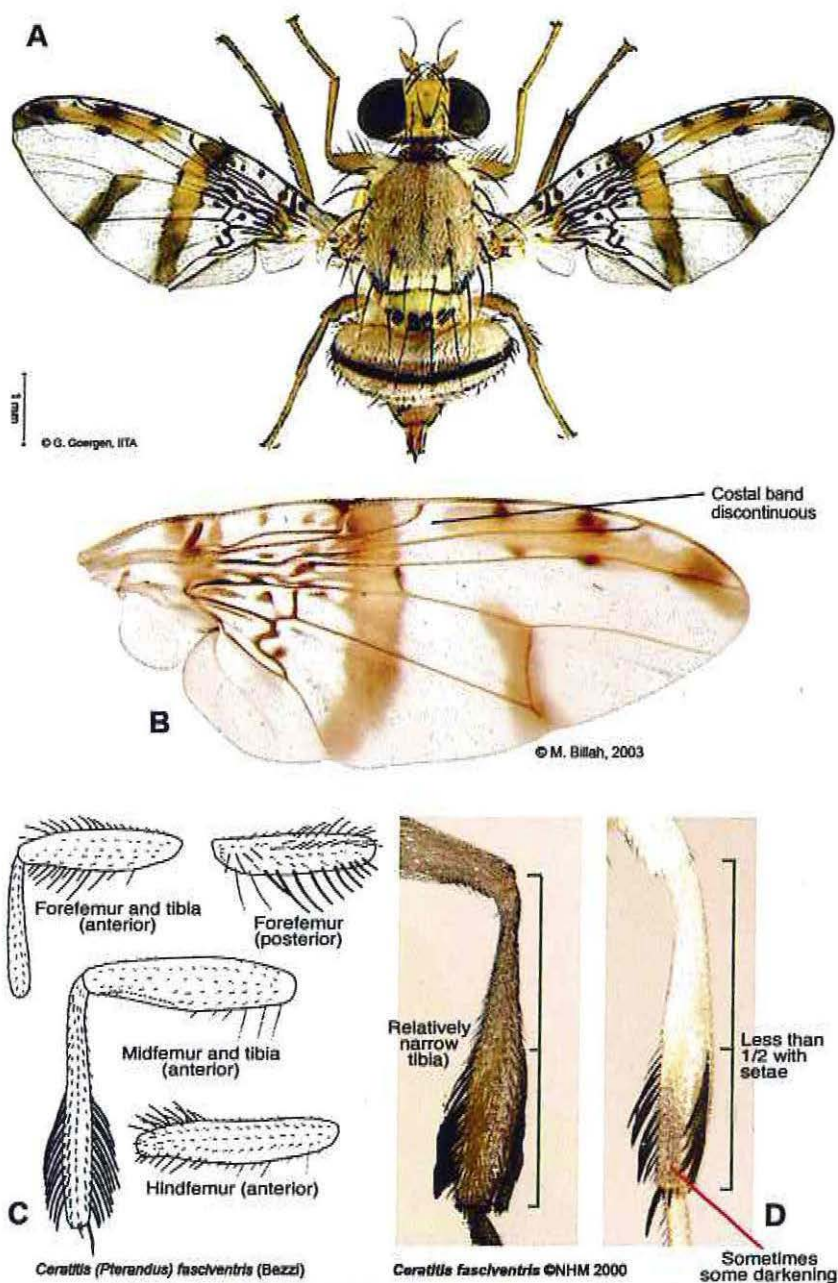


Figure 24. (A) General habitus, (B) wing of female, and (C, D) mid leg feathering of male *Ceratitis fasciventris* (Bezzi)

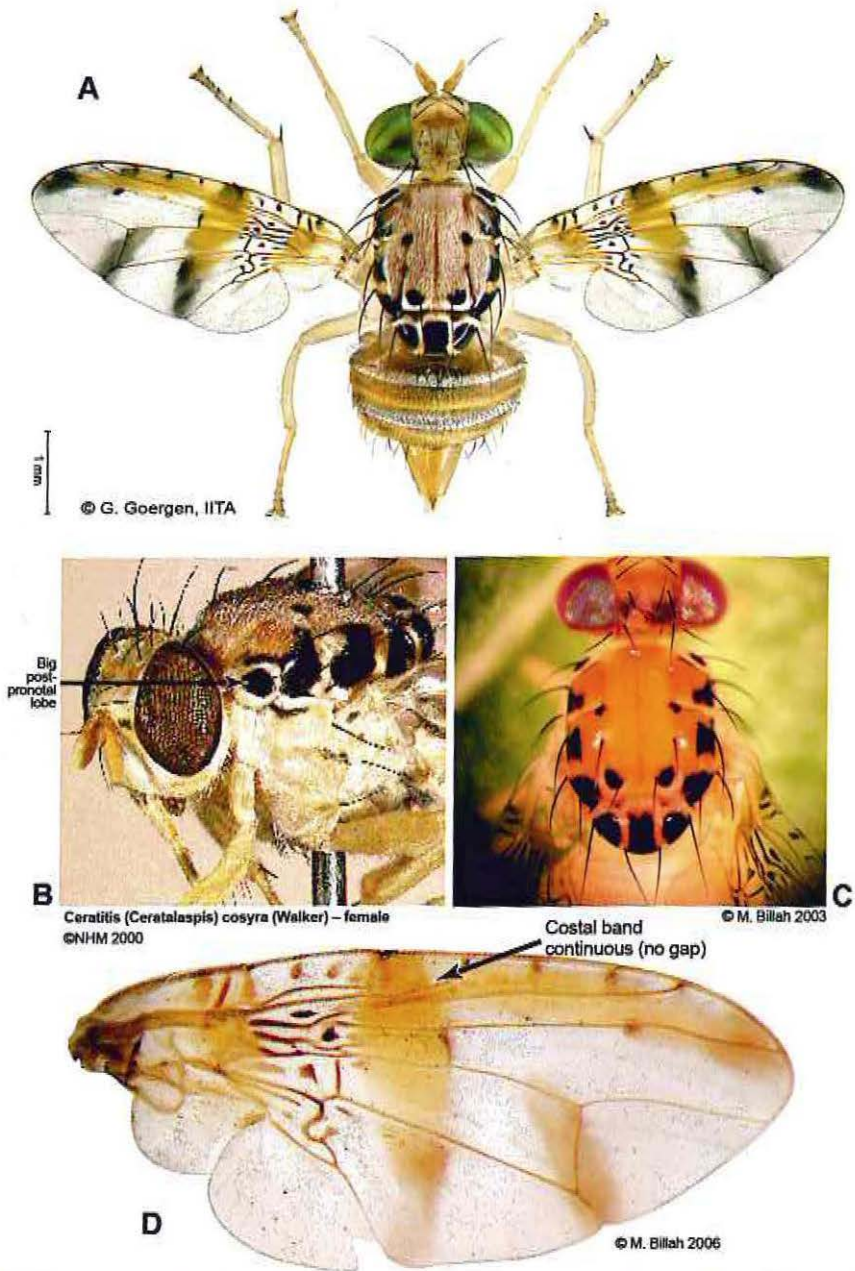


Figure 25. (A) General habitus, (B) post-pronotal lobe with spot, (C) thorax with dark lateral markings on thorax, and (D) continuous costal band on wing of *Ceratitis cosyra* (Walker) (mango fruit fly/marula fly)

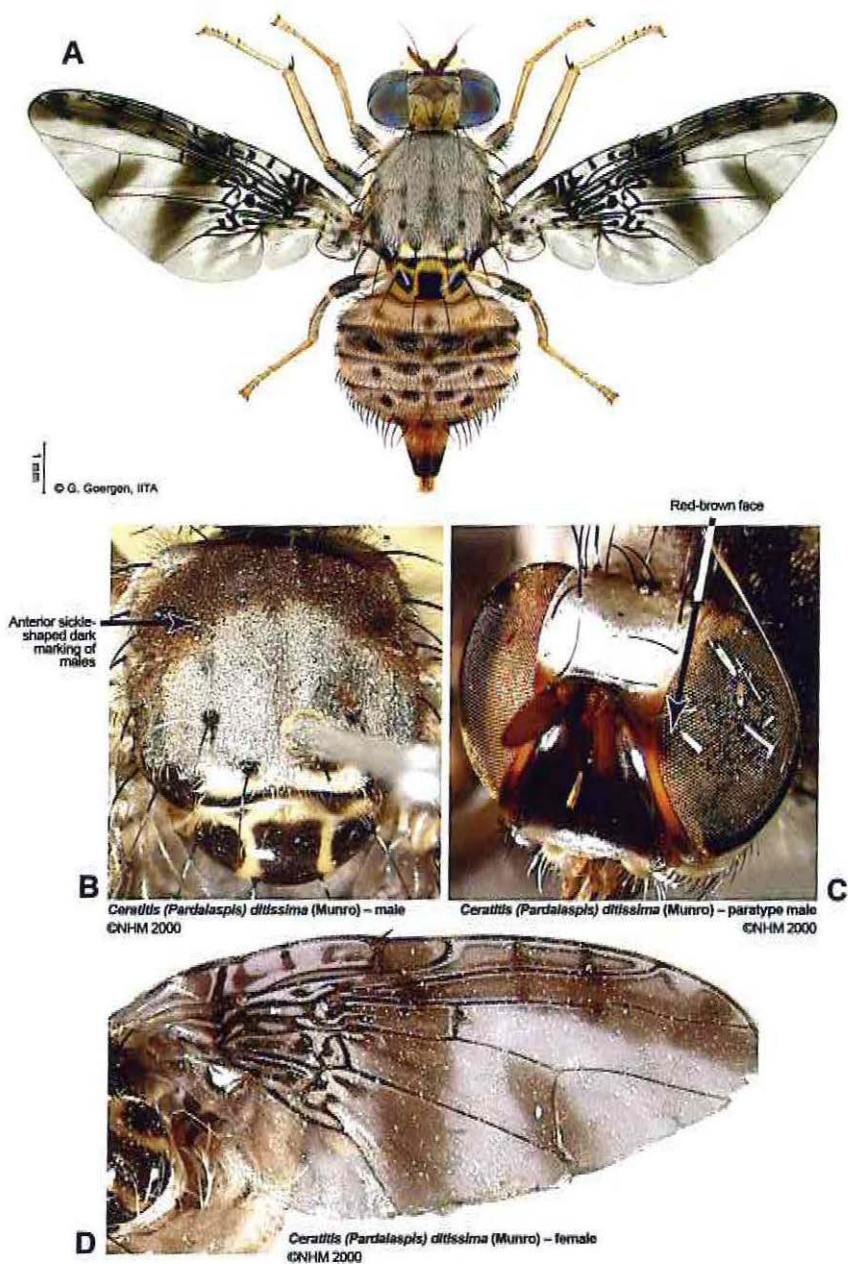


Figure 26. (A) General habitus, (B) thorax of male with sickle-shaped anterior margin, (C) head, with red-brown face, and (D) wing of *C. ditissima* (Munro)

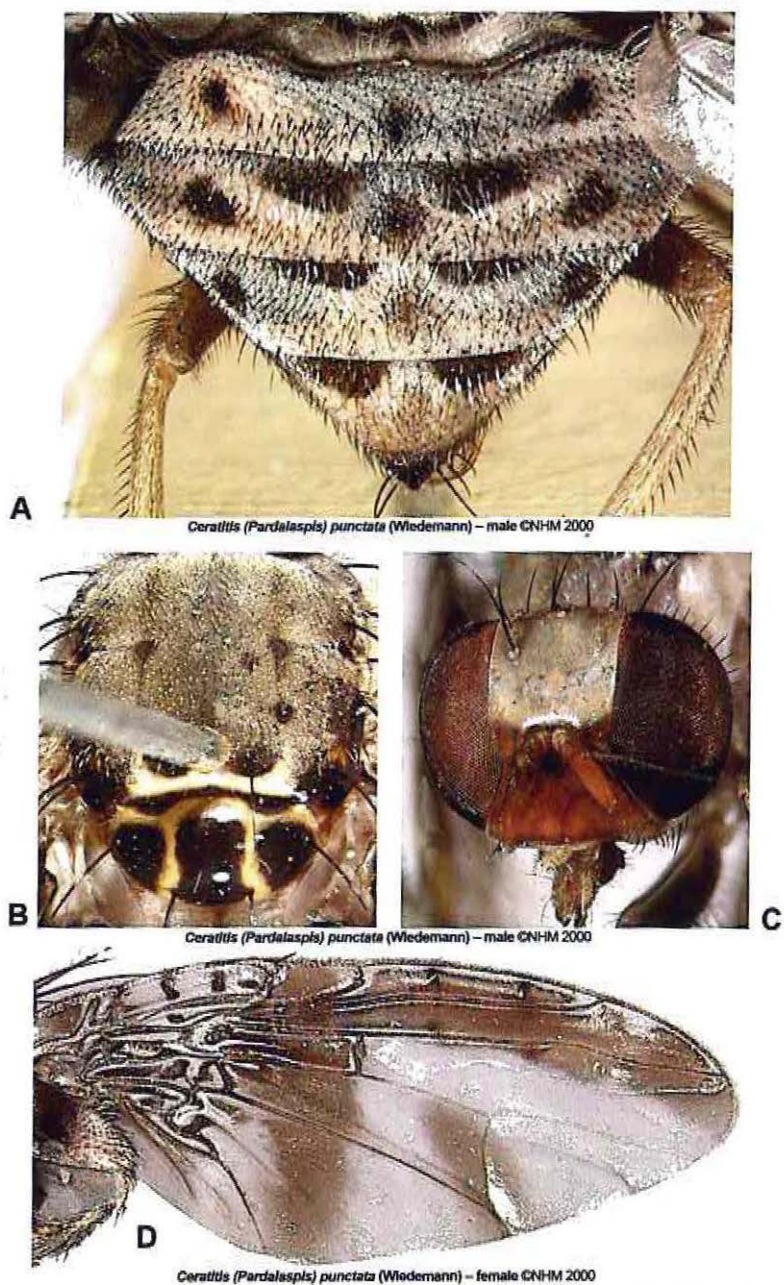


Figure 27. (A) Abdomen, (B) thorax, (C) head, with red-brown face, and (D) wing of *C. punctata* (Wiedemann)

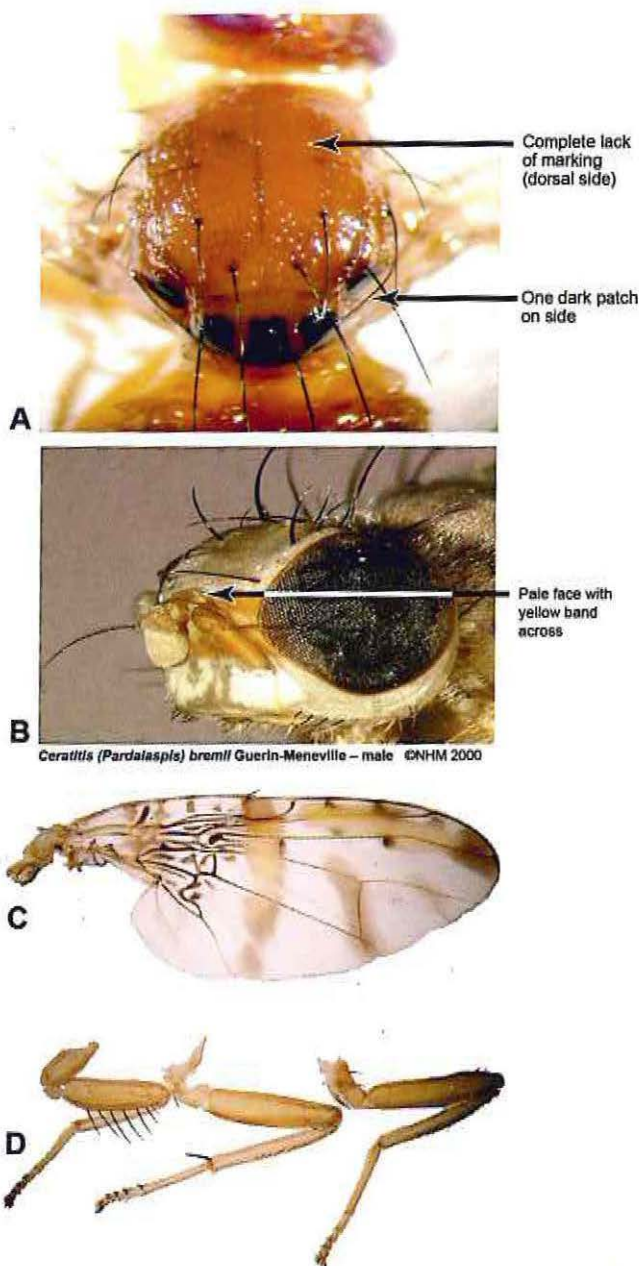


Figure 28. (A) Thorax, (B) head, (C) wing, and (D) fore, mid and hind legs of *C. brevii* (Guérin-Meneville)

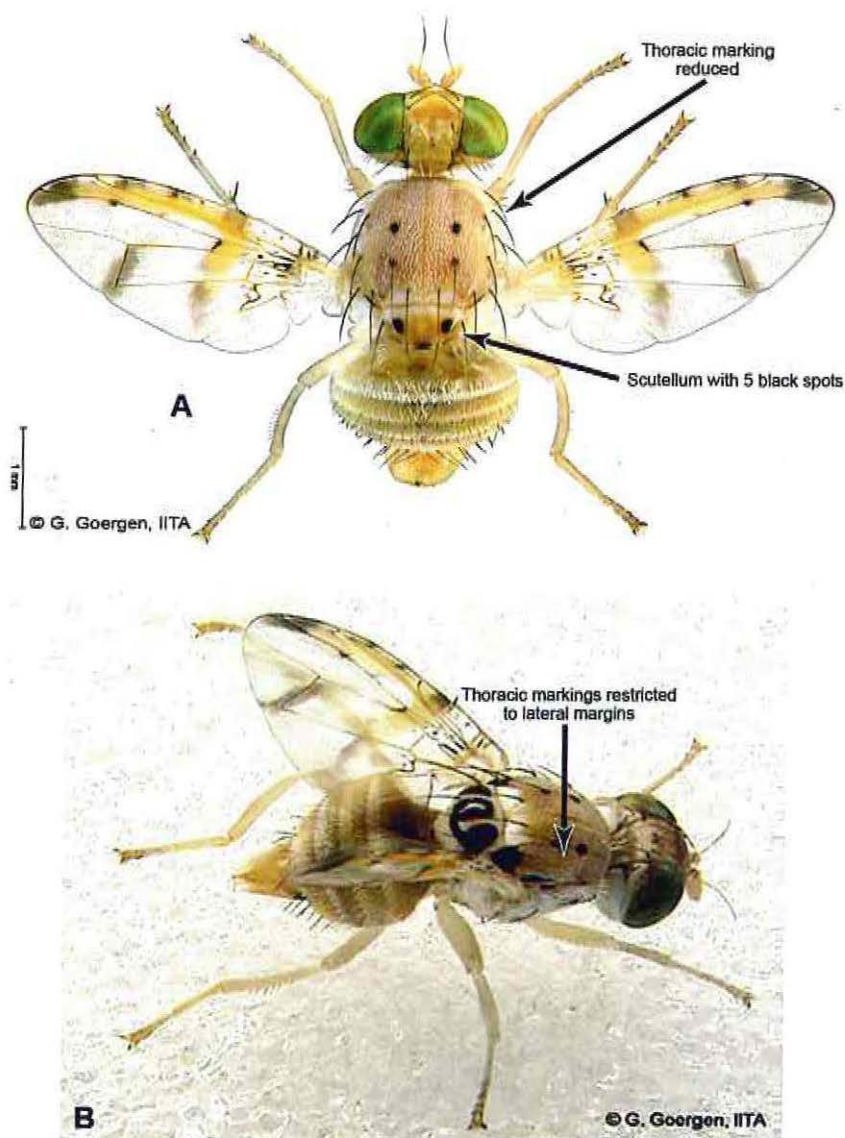


Figure 29. General habitus of (A) *Ceratitis quinaria* (Bezzi) (five-spotted fruit fly), and (B) *Ceratitis silvestrii* Bezzi. Thoracic marking reduced in both species

B. Non-Ceratitis species

C1. Smallish flies (like *C. capitata*). Scutellum almost entirely dark brown to black (white in some non-commercially significant species), at most with yellow spots to the scutellar setae. If wing has preapical cross bands, they join the rest of the wing pattern. Basal cells not reticulate. Species mostly sexually dimorphic..... **Trirhithrum species. (Figure 30)**
..... Section C.

Flies are brown to black, wasp-like and larger than *Ceratitis* species. Scutellum usually yellow, sometimes marked with brown. Wings with simple patterns, except for a costal band and a few with cross bands ..
Dacus and Bactrocera species Section D.

C. Trirhithrum species

Trirhithrum coffeae Bezzi—Coffee fly

Wing with very dark/black mark on costal vein just before subcostal break and a small spot between veins R_{2+3} and R_{4+5} , about 1/3 way from base. Post pronotal lobe dark. Side of thorax with white patches. Male wings paler with diffuse patterning, but dark near base of cell cua_1 (above cup extension). Costal band and posterior apical cross bands in males almost fused and extend beyond M. Tibiae paler apically and dark basally. Abdomen all dark (in both sexes). Pre-apical cross band smaller and more curved, and touches discal crossband at a very small point (at base of cross vein r-m). In *T. nigerrimum* it is almost straight and joins whole length of r-m. Cell c with little patterning (in both sexes) as compared to *T. nigerrimum*.

Females, much darker than males. Small, black spot between veins R_{2+3} and R_{4+5} . Not distinct in females. Post pronotal lobe darker. All femora and tibiae dark. Wing with black mark on costal vein (just before sub costal break), with a smaller one in-between R_{2+3} and R_{4+5} . Wing banding pattern darker and very sharp.

Attacks a variety of coffee species, including arabica (*Coffea arabica*).

Trirhithrum nigerrimum (Bezzi)

Thorax, abdomen and halteres black (Figure 30). Post pronotal lobe dark/brown. Has white patches on the face, but not on side of thorax. Wing pattern with broad costal band and slight hyaline patches between R_1 and R_{2+3} , and R_{2+3} and R_{4+5} . Costal hyaline-indentations very small, almost non-existent. Posterior apical cross band reduced to small mark from costal band (not extending beyond middle of cell r_{4+5}). In males, this is fused with tip of costal band, forming a big diffused spot that

extends beyond vein M. **Costal band does not end in an expanded apical spot, but ends halfway between veins R_{4+5} and M.** Basal part of wing with little hyaline spots. **No bulla** (small isolated black spot in middle of cell c). **Cell sc filled with very dark spot between sub costal break and end of R_1 .** All femora dark, tibiae light brown/pale.

Wing patterns and marks generally sharper and darker in females (male patterns infusate or diffuse). **In females, pre-apical cross band is sharper, slightly curved, and joins discal cross band at entire length of cross vein r-m.** (Male bands not distinguishable (cf. *T. coffeae*) (Figure 30). Attacks arabica and robusta coffee (*Coffea arabica* and *C. canephora*).



Figure 30. *Trirhithrum nigerrimum* (Bezzi)

D. *Dacus* and *Bactrocera* species

Abdomen with **all tergites FUSED** into a single plate (with smooth transverse lines along boundaries). No overlapping sclerites (This is seen from the side, Figure 31A).....***Dacus* species Section E.**

Abdomen with **all tergites SEPARATED**. Overlapping sclerites clearly observed from side (see Figure 31B).....***Bactrocera* species Section F.**

E. *Dacus* species

1. Scutum with lateral and/or medial yellow or orange stripes (vittae) (see Figure 31A) 2.
Scutum without yellow or orange stripes (see Figures 36B and 37) 4.
2. Wing with very broad costal band 3.

Costal band not broad. Presence of a small apical spot just at the end of vein R_{4+5} , and restricted to < 1/2 distance between veins R_{4+5} and

M. Crossvein r-m sometimes covered by infusate dark mark. **Scutum with broad dark background in which lies the medial yellow stripe.** Postpronotal lobe and scutellum yellow (orange). Anatergite, katatergite yellow. **All tibiae dark.** Fore, mid and hind femora yellow/orange at base and dark apically—hind femur with more yellow (~2/3) than dark. No pre-scutellar acrostichal setae

D. punctatifrons..... (Figure 35)

3. Broad costal band **very dark and continuous** from base to apex, expands apically over vein R_{4+5} , almost reaching vein M. **Band forms an infusate dark mark over crossvein r-m.** Combined depth of cells r_1 and r_{2+3} at r-m crossvein, about equal to length of r-m cross-vein. **Postpronotal lobe half pale at top and brown down.** Anatergite, katatergite yellow. All tibiae dark. **Fore and mid femora 2/3 dark from apical end, basal 1/3 yellow, while hind femur has more yellow at base than apex.** Scutellum yellow. Anterior supra-alar setae present, but without pre-scutellar acrostichal setae ***D. bivittatus***

Dacus bivittatus is recognised as a dark orange to red-brown species, with lateral and median yellow stripes on the thorax. The scutellum is entirely yellow. The wings have a broad costal band from the base to the apex, and a black mark overlying the sharp-pointed cubital cell. It is a pest of Cucurbitaceae, including a number of wild cucurbit plants. *Dacus bivittatus* is attracted to Cuelure, but not methyl eugenol.

Broad costal band slightly lighter than in *D. bivittatus*, expands apically over vein R_{4+5} , fills cell r_{4+5} apically and extends over vein M. **No infusate mark over cross vein r-m.** Post pronotal lobe all dark/brown. Anatergite orange or brown, katatergite with 1 or 2 small irregular yellow spots in centre. All tibiae dark. **Fore and mid femora completely dark/brown.** Hind femur 2/3 yellow at base and dark apically. **Scutellum dark, with yellow marks apically.** Without anterior supra-alar setae and pre-scutellar acrostichal setae..... ***D. lounsburyi***

4. Both anatergite and katatergite (Figure 33A) with some yellow marking 5.

Yellow marking confined to either anatergite or katatergite (the other brown) 6.

5. Yellow spot in postero-lateral area not confined to katatergite, but extends across **both katatergite and anatergite**, forming a stripe. Yellow stripe separated from scutellum only by **one-third its length**. Postpronotal lobe and scutellum yellow. **Mid femur markedly darker in apical half than basal half. All femora yellow in basal half, and brown/dark in apical half.** Costal band with **rounded apical spot ending just at tip of vein R_{4+5} .** General body colour orange-brown..... ***D. vertebratus*** (Figure 36A).

This species has no stripes on the thorax, but has a stripe that covers most of the anatergite and katatergite on the sides of the thorax. Wing has a narrow costal band that is expanded apically to form an apical spot. It is a pest of Cucurbitaceae, especially watermelon (*Citrullus lanatus*), but also cucumber, squash, cantaloupe and many wild species of cucurbits. Males are attracted to Verture.

A predominantly orange species. Basal part of scutum with 2 black rounded spots. Presence of 2 black rounded spots on either side of abdominal tergite 3. Most part of anatergite and katatergite covered by a yellow stripe. **Apical half of mid femur dark.** No darkening in fore and hind femora. **Apical spot extends > 1/2 way between veins R_{4+5} and M.** Anterior supra-alar and prescutellar acrostichal setae present

***D. frontalis*.....(Figure 37A).**

No longitudinal stripes on thorax, but a stripe covering most of the anatergite and katatergite. Differs from *D. vertebratus* and *D. ciliatus* by the darkened apex of the mid-femur. Wing with apical spot. Pest of Cucurbitaceae, including cucumber, watermelon, sweet melon, pumpkin and gourds. Attracted to Cuelure.

6. Yellow spot on katatergite only, separated from scutellum by a distance of about its own diameter. Mid femur yellow/orange, but may be slightly brownish at apical end. Fore and hind femora yellow/orange. Narrow costal band, with a small apical spot extending halfway between veins R_{4+5} and M. Two small dark spots on lower scutum and a 3rd one on upper end, which extends almost to a line, or at times fading away completely. Postpronotal lobe and scutellum yellow/pale. Abdominal tergite 3 with 2 dark spots on either side.....

***D. ciliatus*(Figure 37B).**

This is a predominantly orange fly without longitudinal stripes, but with two yellow areas on the lateral surfaces of the thorax. Wings with brown costal band, and an apical spot. Pest of Cucurbitaceae, including cucumber, squash, watermelon, cantaloupe, melon, various gourds and pumpkins.

F. *Bactrocera* species

1. Scutum **with at least medial or lateral yellow or orange stripes (vittae)** (Figure 32A)..... 2.

Scutum **without yellow or orange stripes (vittae)** 9.

2. Presence of **only lateral yellow stripes** on scutum (see Figures 32A and 34A)..... 3.

Presence of **both lateral and medial yellow stripes** on scutum) (see Figure 35) 8.

3. No medial yellow stripes or vittae. **Costal band continuous and runs to apical end of wing** 4.
 No medial yellow stripes. Costal band **not continuous**, interrupted at end of vein R_{2+3} and ends in an **isolated apical band** (see **Figures 32C D and 40A**) 7.
4. Abdomen with **conspicuous black T-shaped mark** on tergite 3 5.
 Abdomen with **no conspicuous T-shaped mark** 10.
5. **Fore femur with conspicuous dark markings (Figure 38B)**. Postpronotal lobe with anteromedial corners red-brown. Lateral postsutural vittae narrow to medium, parallel sided and ending posteriorly at *ia* setae. Microtrichia in anterodistal corner of cell *c* only restricted to upper part (lower part bare). Lateral marking on tergite 5 absent or narrow, not extending laterally above ceromata. Lateral markings on tergites 3 and 4 usually narrow (Transverse bar of T-shaped mark)
 ***B. kandiensis* (Figures 38, 39A R & 39B 3)**.
 No conspicuous dark markings on fore femur 6.
6. **All femora yellow and all tibiae dark, with hind tibiae conspicuously darker** (see **Figure 34B**). Scutum predominantly black. **Only lateral yellow stripes present**, no medial stripes. Fore femur (in both sexes) without black spot. Abdominal tergites 3–5 **with black T-shaped mark** (cf. **Figure 33B**). Costal band of wing not overlapping vein R_{2+3} , no sharp broadening or apical spot at end of R_{2+3} . Apical tip usually fills anterior half of cell r_{2+3} between end of veins R_{2+3} and R_{4+5} . Anatergite and katatergite both yellow (**Figure 33A**). Males with pecten.....
 ***B. dorsalis* (Figure 39B 1)**.
Fore femur without any black spot. Scutum brown to black, but with high degree of variations from dark brown to complete black (see **Figure 32A**). Postpronotal lobe yellow. Scutellum yellow, except for a narrow black band at the base. Mediotergite **laterally black and red-brown centrally**. **Only lateral yellow stripes present**. No medial stripes. Aggregation of microtrichia in cell *br* almost complete except for a small portion ($< 1/2$) which is bare. **All femora yellow and all tibiae dark, with hind tibiae conspicuously darker (Figure 34B)**. Abdominal tergites 3–5 **with black T-shaped mark**. T-shaped mark with broader transverse band across anterior margin of tergite 3, which at times extends to the lateral sides of tergites 4 (see **Figures 34A and 39A L**). Anatergite and katatergite both yellow (**Figure 33A**). Males with pecten ***B. invadens* (Figure 34)**.

B. invadens was only recently described by Drew *et al.* (2005). The thorax manifests variable colour patterns. It is apparently native to Sri Lanka, but recently invaded Africa and rapidly spread across the continent up to the

Comoros Islands. It is known from Benin, Cameroon, Democratic Republic of Congo, Ghana, Kenya, Mozambique, Namibia, Nigeria, Senegal, Sudan, Togo, Tanzania, Uganda, Zambia and Zanzibar. The potential wide host range makes it an extremely dangerous invasive species. Males attracted to methyl eugenol.

7. Body predominantly **pale-brown to red-brown** (see **Figure 40A**). Scutum with **only lateral yellow stripes (vittae)**. Presence of anterior supra-alar setae, prescutellar acrostichal setae and 2 scutellar setae (apical pair). Leg colourations as in *B. dorsalis*, but **hind tibiae with lighter middle part. No conspicuous black T-shaped mark** on abdomen; transverse band more prominent (cf. **Figure 33B**). **Highly reduced wing pattern, with an almost isolated apical band** (see **Figure 32C D**). Anatergite and katatergite both yellow (as in **Figure 33A**). Males with pecten ***B. zonata* (see adult: Figure 40A).**

A predominantly pale orange-brown to red-brown species with lateral yellow stripes on the thorax. Has reduced wing pattern with narrow black costal band not extending to the wing apex, and a brown marginal stripe at the wing apex. No pre-apical crossband. *B. zonata* has extended its range from Asia, and is currently known from Egypt and Mauritius in the Afrotropical region. The wide host range and the danger of it spreading southwards from Egypt make it a very serious invasive species in Africa. Males are attracted to methyl eugenol.

Scutum predominantly black with lateral yellow stripes. **Facial spots transverse (not rounded), almost joining to form a line above the mouth opening.** Anterior supra-alar setae prescutellar acrostichal seta and 2 scutellar setae present. Wing with reduced pattern, and **costal band interrupted to form an isolated apical spot (Figure 32C D)**. Scutellum with a narrow black basal band. Male with pecten ***B. correcta*.**

8. Scutum with anterior supra-alar setae and prescutellar acrostichal setae present in males. Males also have 2 scutellar setae (apical pair). **Wing with pre-apical cross band and broad apical spot** (see **Figures 32B R and 36B**) Anatergite and katatergite both yellow (as in **Figure 33A**). Lateral thoracic yellow mark with 2 dark marks on either side. Fore femur yellow. Mid and hind femora yellow at base, but dark at apical ends. **Fore and hind tibiae dark, mid tibia only dark at basal end** (non-mango pest, but commonly encountered in other fruits and vegetables) ***B. cucurbitae* (see adult: Figure 36B).**

This is a predominantly orange-brown species with lateral and median yellow stripes on the thorax. Wings characteristically marked—a costal band, an apical spot, a mark over the cubital cell and a preapical crossband. It is native to Asia, but has been introduced into Africa and is currently known from Egypt, Ghana, Kenya, Tanzania and also Mauritius and Réunion. It is a serious pest of Cucurbitaceae, but has been reared from over 125 species of plants, including non-cucurbits. The potentially wide host range makes it an extremely dangerous invasive species. Males are attracted to Cuelure.

Medial stripe very prominent ('arrowhead-like' facing downwards). Wing with costal band expanded into apical spot. Scutellum with 4 marginal setae (2 apical scutellar and 2 basal scutellar). Face with a black line across mouth opening (from Oriental Asia and may be a potential pest of Cucurbitaceae; could also be confused with *B. cucurbitae*)

..... *B. caudata*.

9. Scutum with a distinct black area, and red-brown in the lateral area (**giving the appearance of lateral stripes**). Scutum without anterior supra-alar setae or prescutellar acrostichal setae. Scutellum with only 2 marginal setae (apical pair). **Wing hyaline, except for a small mark at apex of vein R_{4+5}** , and sometimes a slight darkening of cell sc. Area of wing close to apex of vein A_1+CuA_2 with a dense patch of microtrichia (i.e. along *cup* extension). **Segment 1 of abdomen (basal part of sytergite 1+2) about twice as broad at apex as at base**, and with segment 2 being part of the **general rounded shape** formed by segments 2–5. Oviscape slightly flattened in cross section, giving distinct lateral margins.....

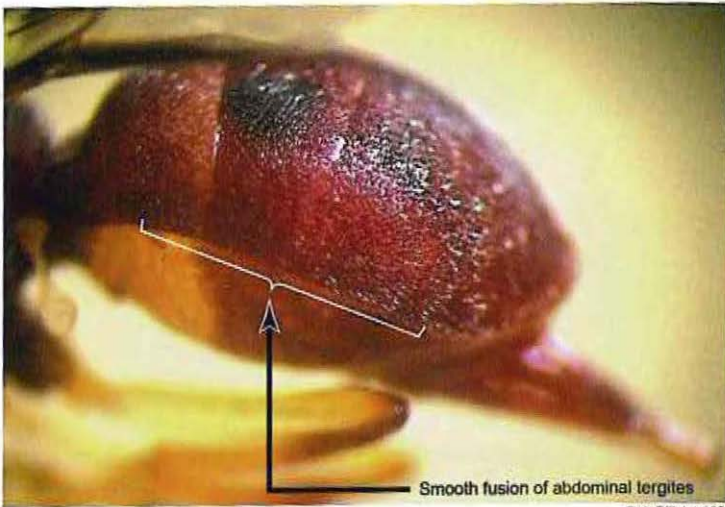
..... *B. oleae* (see adult: Figure 40B).

B. oleae is a small reddish-brown species with no longitudinal yellow stripes on the thorax. The abdomen is orange medially and black laterally. Wings with reduced pattern and a distinct spot in the apex. Attacks only olives (*Olea europaea* and *O. africana*).

10. Scutum predominantly black with lateral yellow stripes. **Mesopleural stripe broad**, extending almost to postpronotal lobe dorsally (sometimes beyond postpronotal lobe). **Postpronotal lobes pale/orange**. Anatergite and katatergite yellow, with small black marking on posterior sides (near halteres). Hind tibiae dark at the apical and basal ends, with patches of brown/pale sections in the middle. **All femora pale/yellow**, but slightly darkened apically. Lower/inner apical part of femora with small irregular black markings. Anterior supra-alar setae, prescutellar acrostichal setae and 2 scutellar setae present. **Abdomen predominantly orange or pale without medial dark stripe**. Costal band expanded into distinct apical spot at apex. Apical spot expands from tip of vein R_{2+3} across vein R_{4+5} , ending up about half-way in cell r_{4+5} and darker than rest of costal band. Male with pecten. Female with a distinctive aculeus. **Basal end of aculeus and last abdominal segments conspicuously dark**

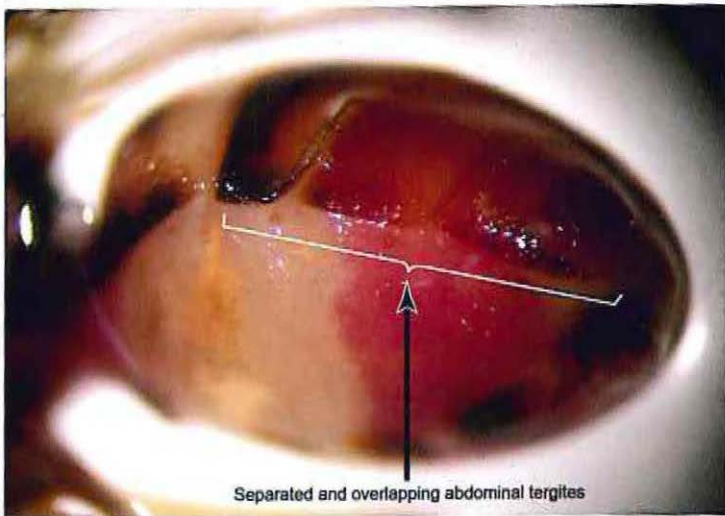
..... *B. latifrons*

Attracted to Latilure (synergised with cade oil), but not to Cuelure or methyl eugenol. Recently detected in Africa (Tanzania and Kenya in 2006 and 2007, respectively). Mostly restricted to the solanaceous crops.



A *Dacus* species

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B *Bactrocera* species

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Figure 31. The main distinguishing features between (A) *Dacus* Fabricius and (B) *Bactrocera* Macquart

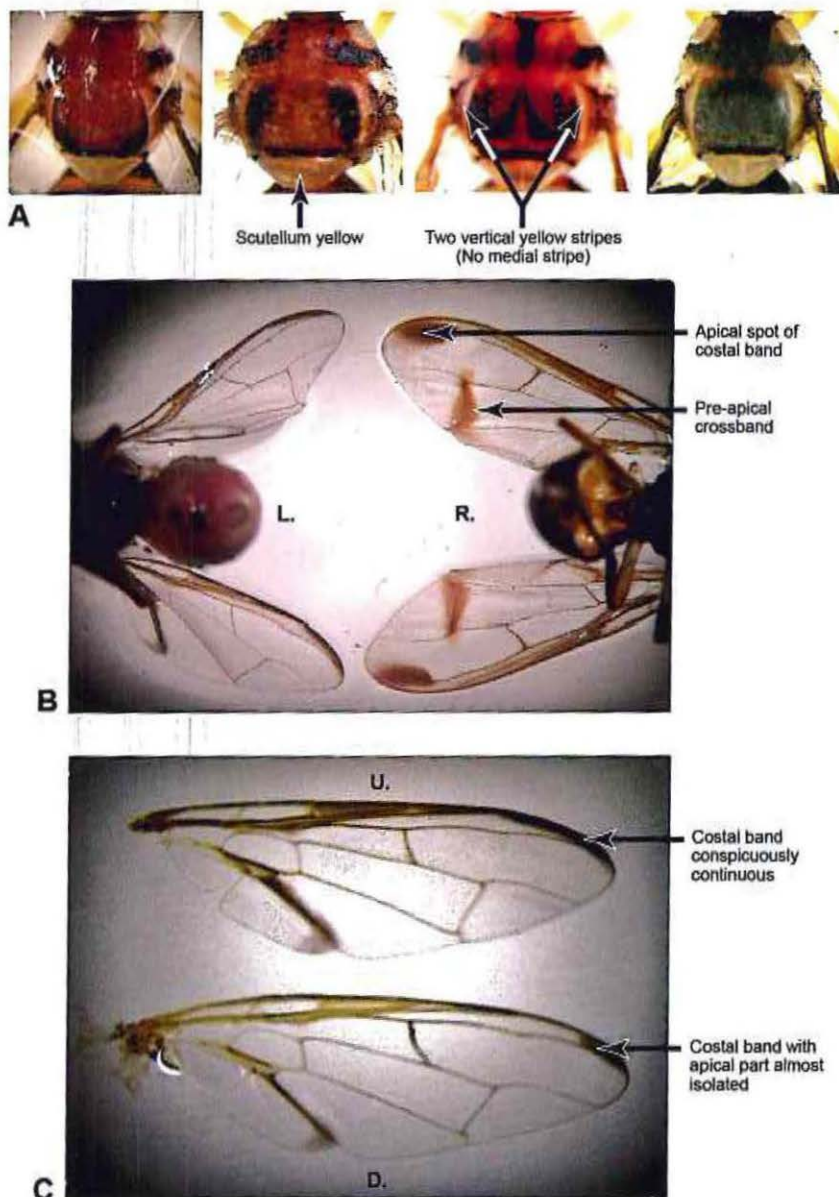


Figure 32 A-C. Thoracic and wing pattern variations in some *Bactrocera* species, **A** = Variable thoracic colour patterns of *B. invadens*, **B** = wing patterns of *B. invadens* (L) and *B. cucurbitae* (R), **C** = wing patterns of *B. invadens* (U) and *B. zonata* (D)

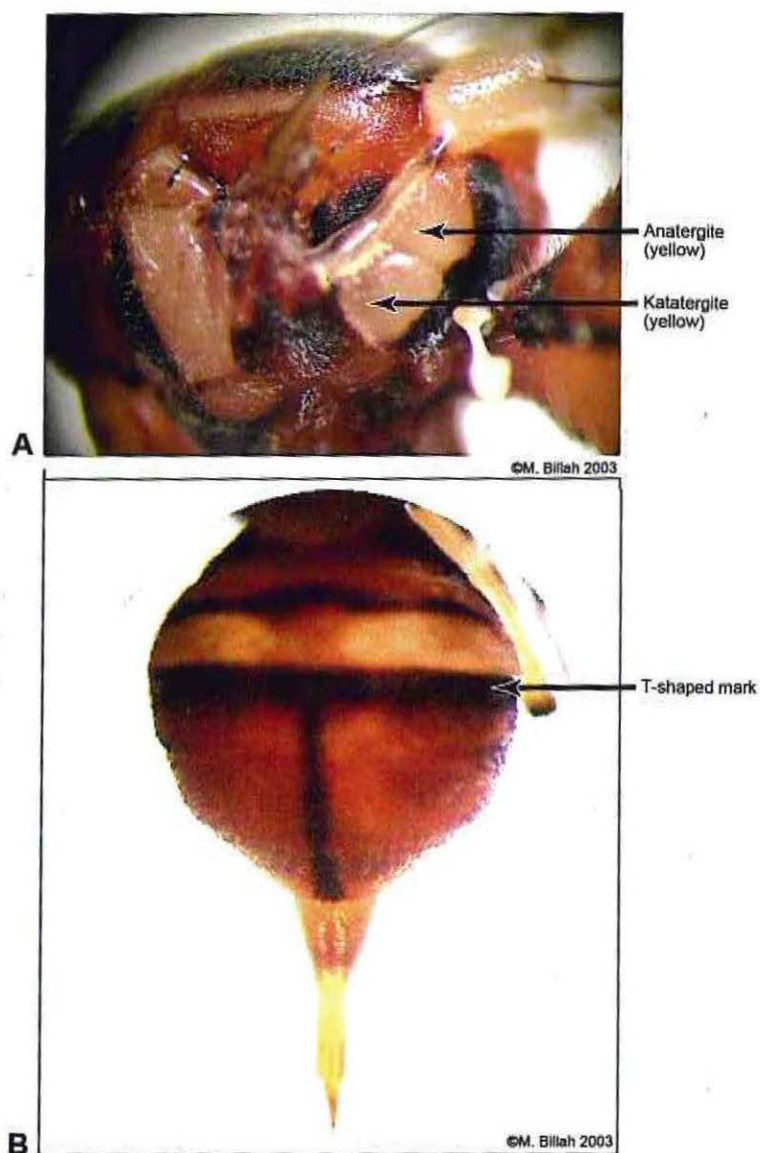


Figure 33. Thoracic and abdominal features of *Bactrocera invadens* female: **A** = Thorax (side view), and **B** = abdomen of female (dorsal view)

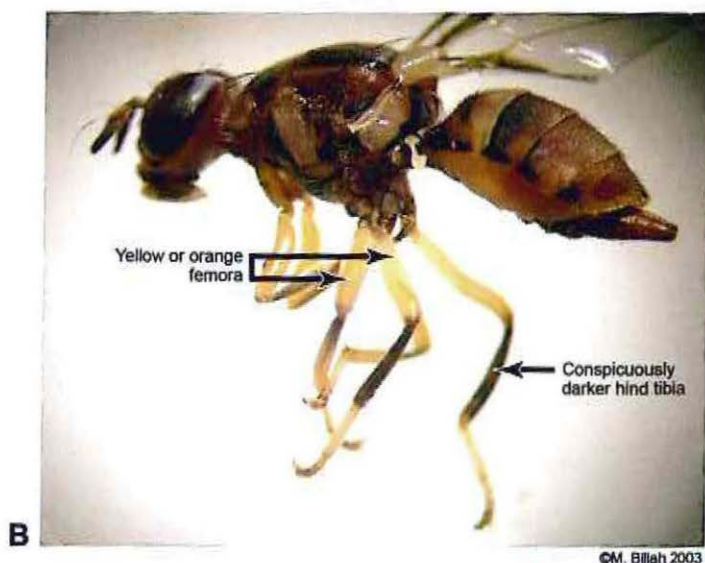
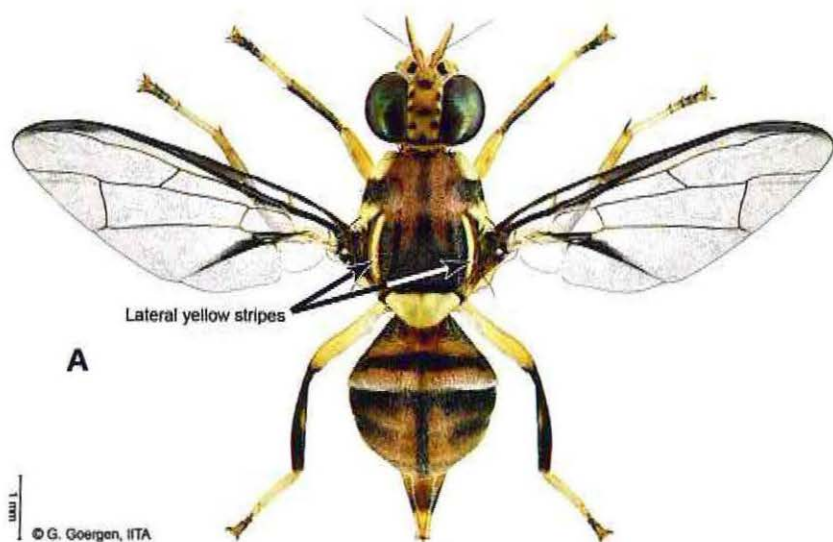
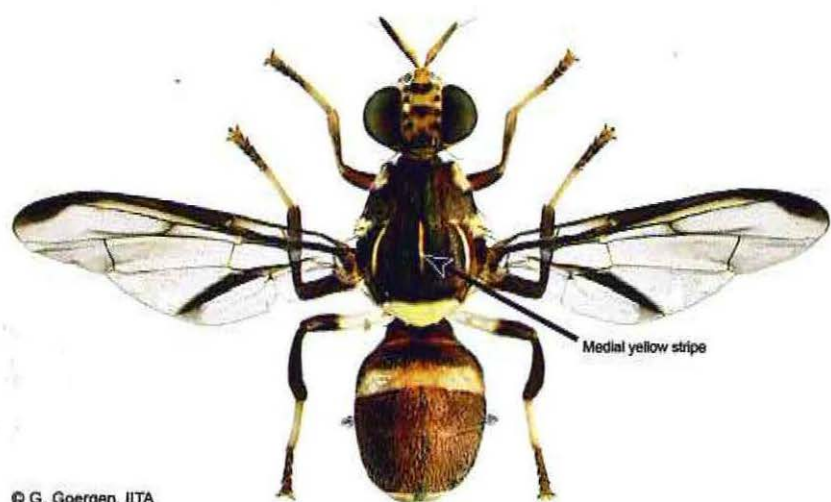


Figure 34. General habitus of *B. invadens*, (A) dorsal view, and (B) side view



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Figure 35. General habitus of *D. punctatifrons*. Note presence of medial yellow stripe

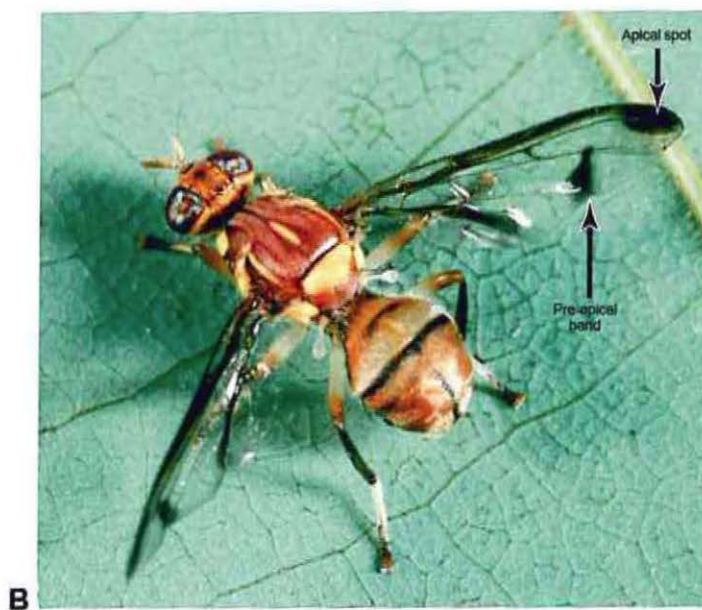
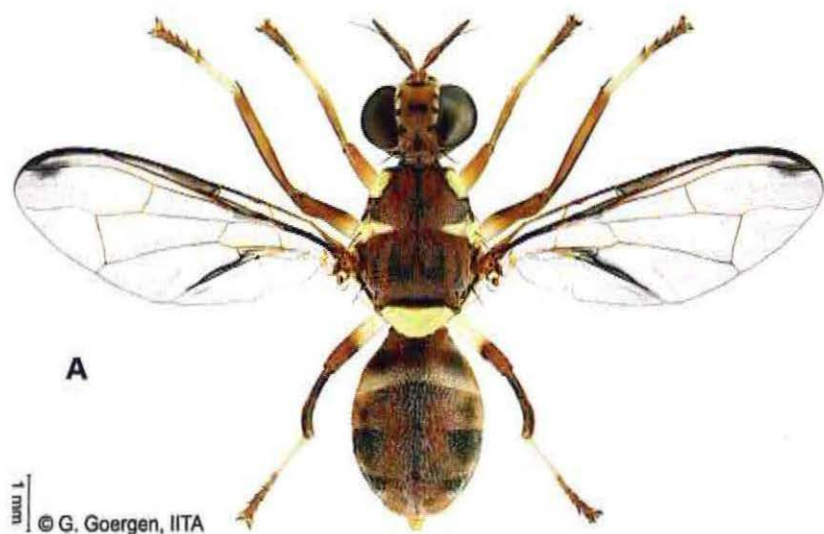


Figure 36. General habitus of (A) *D. vertebratus* and (B) *B. cucurbitae*

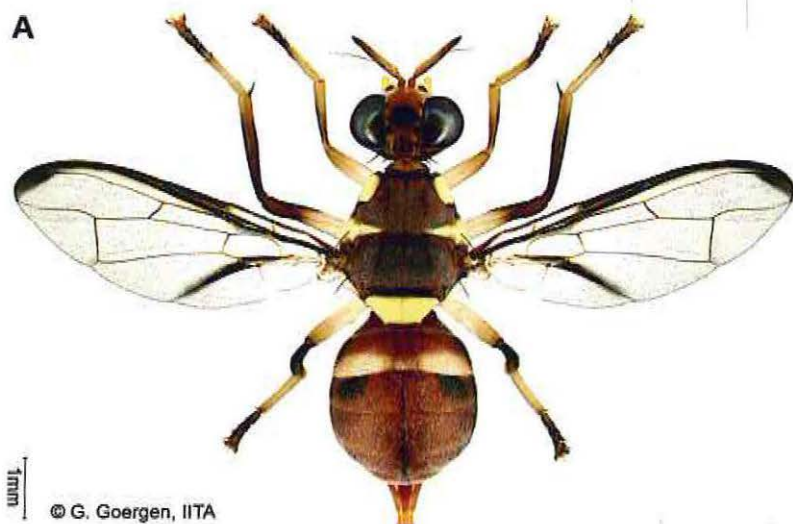


Figure 37. General habitus of (A) *D. frontalis*, and (B) *D. ciliatus*. Note the presence of 'T' shape of abdomen of the two species

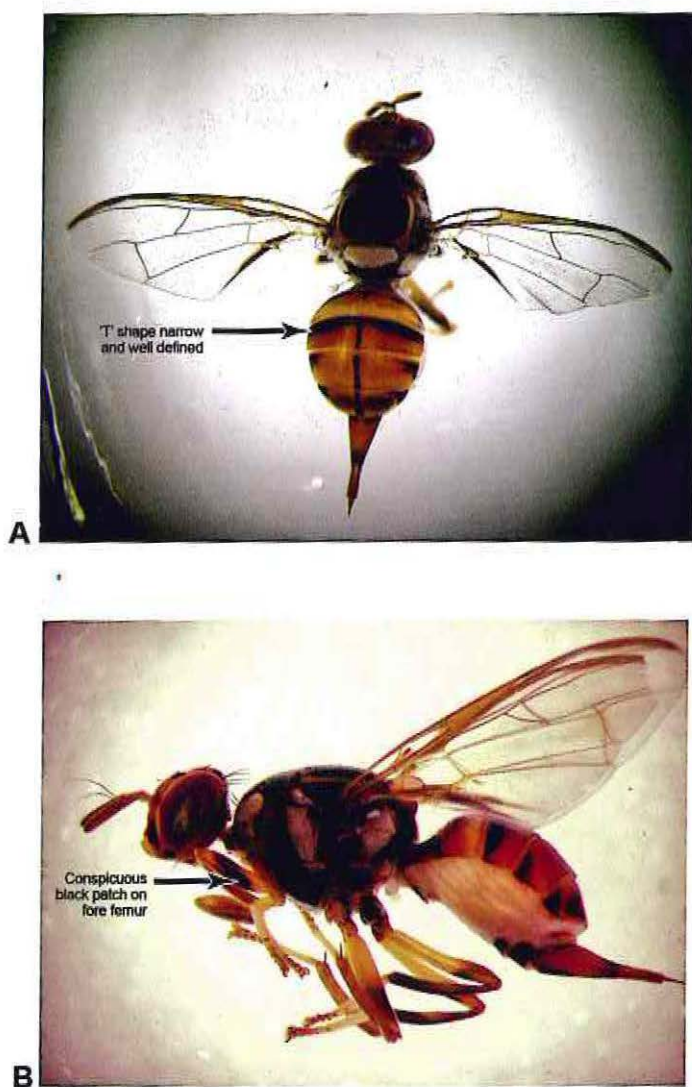


Figure 38. General habitus of *B. kandiensis*, (A) dorsal view, and (B) side view.

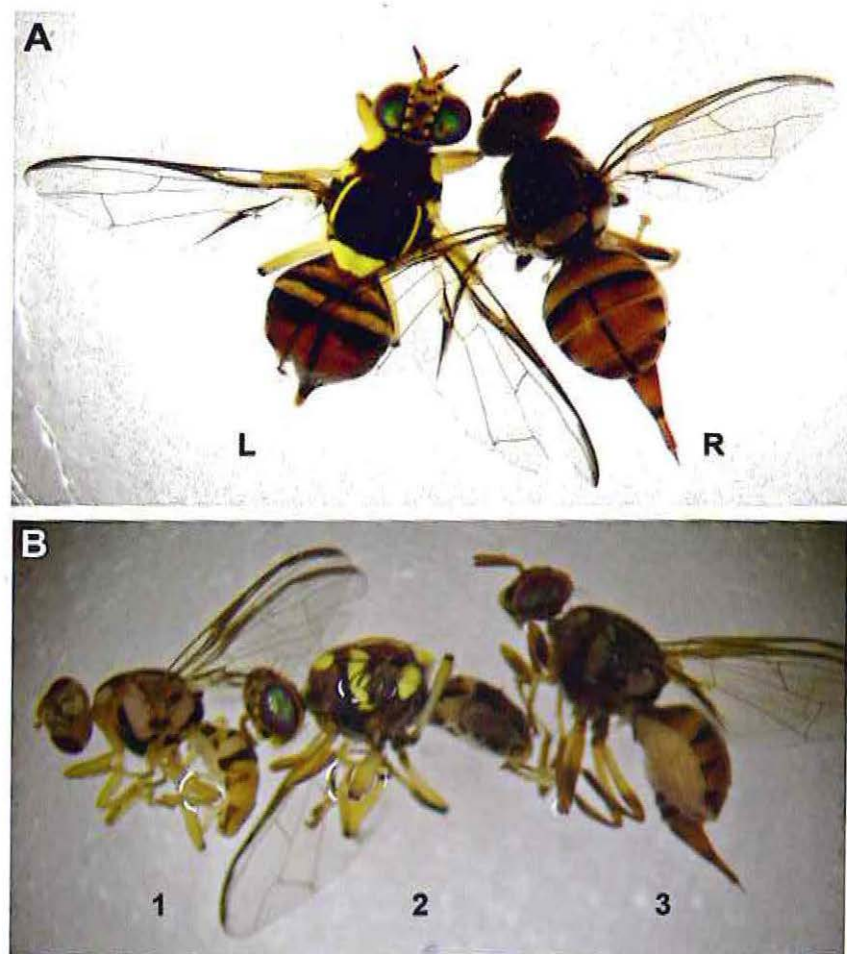


Figure 39. General appearance of some *Bactrocera* species, (A) comparison of *B. invadens* (L) and *B. kandiensis* (R), and (B) comparison of *B. dorsalis* (1), *B. invadens* (2) and *B. kandiensis* (3)

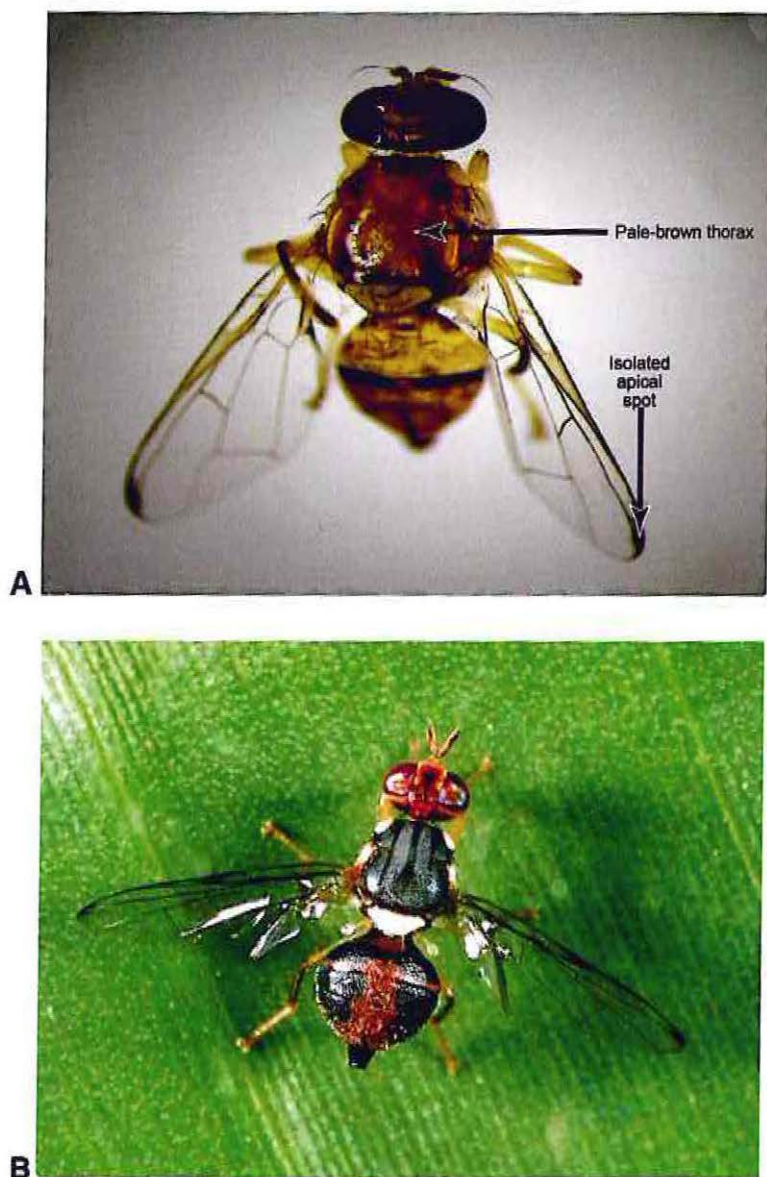


Figure 40. General physical appearance of (A) *B. zonata*, and (B) *B. oleae*. Note isolated apical spot on wings

References

- Agnew A. D. Q. and Agnew S. (1994) *Upland Kenya Wild Flowers*. East African Natural History Society, Nairobi. 374 pp.
- Beentje H. J. (1994) *Kenya Trees, Shrubs and Lianas*. National Museums of Kenya. 722 pp.
- Blundell M. (1994) *Wild Flowers of East Africa*. Harper Collins, Hong Kong. 160 pp.
- Copeland R.C., Wharton R.A., Luke Q., De Meyer M., Lux S., Zenz N., Machera P. and Okumu M. (2006) Geographic distribution, host fruit, and parasitoids of African fruit fly pests *Ceratitis ananæ*, *Ceratitis cosyra*, *Ceratitis fasciventris*, and *Ceratitis rosa* (Diptera: Tephritidae) in Kenya. *Annals of the Entomological Society of America* 99, 262–278.
- Cunningham R.T. (1989) Parapheromones, pp. 221–229. In *Fruit Flies, Their Biology, Natural Enemies and Control* (Vol. 3A) (Edited by A.S. Robinson and G. Hooper). Elsevier, Amsterdam.
- De Meyer M. (1996) Revision of the subgenus *Ceratitis* (*Pardalaspis*) Bezzi, 1918 (Diptera, Tephritidae, Ceratitini). *Systematic Entomology* 21, 15–26.
- De Meyer M. (1998) Revision of the subgenus *Ceratitis* (*Ceratalaspis*) Hancock (Diptera: Tephritidae). *Bulletin of Entomological Research* 88, 257–290.
- De Meyer M. (2000) Systematic revision of the subgenus *Ceratitis* MacLeay s. s. (Diptera: Tephritidae). *Zoological Journal of the Linnaean Society* 128, 439–467.
- De Meyer M. (2001a) Distribution patterns and host-plant relationships within the genus *capitata* MacLeay (Diptera: Tephritidae) in Africa. *Cimbebasia* 17, 219–228.
- De Meyer M. (2001b) On the identity of the Natal fruit fly, *Ceratitis rosa* Karsch (Diptera: Tephritidae). *Entomologie* 71, 55–62.
- De Meyer M., Robertson M., Mansell M., Ekesi S., Tsuruta K., Mwaiko W., Vayssières J.-F. and Peterson T. (2009) Ecological niche and potential geographic distribution of the invasive fruit fly *Bactrocera invadens* (Diptera, Tephritidae). *Bulletin of Entomological Research* doi:10.1017/S0007485309006713 (ePublication ahead of print)
- De Meyer M., Robertson M.P., Peterson A.T. and Mansell M.W. (2008) Ecological niches and potential geographical distributions of Mediterranean fruit fly (*Ceratitis capitata*) and Natal fruit fly (*Ceratitis rosa*). *Journal of Biogeography* 35, 270–281.
- De Meyer M., Mohamed S. and White I.M. (2007) Invasive fruit fly pests in Africa. <http://www.africamuseum.be/fruitfly/AfroAsia.htm> (accessed 1 June 2009).
- De Meyer M. and White I.M. (2004) True fruit flies (Diptera, Tephritidae) of Africa. A queryable website on taxon and specimen information for afrotropical ceratitidine fruit flies. Available at: <http://projects.bebif.be/enbi/fruitfly/>. Royal Museum for Central Africa, Tervuren. Access date: 13/06/2006.
- De Meyer M., Copeland R. S., Wharton R. A. and McPherson B. A. (2002a) On the geographical origin of the medfly, *Ceratitis capitata* (Wiedemann). (Abstract: 6th Int'l Symposium on fruit flies of Economic Importance, Stellenbosch, S. Africa).
- De Meyer M., Copeland R. S., Lux S. A., Mansell M., Quilici S., Wharton R., White I. M. and Zenz N. J. (2002b) Annotated checklist of host plants for Afrotropical

- fruit flies (Diptera: Tephritidae) of the genus *Ceratitis*. Musée Royal de l'Afrique Centrale Tervuren, Belgique, *Documentation Zoologiques* 27, 1–91.
- Drew R. A. I., Tsuruta K. and White I. M. (2005) A new species of pest fruit fly (Diptera: Tephritidae: Dacinae) from Sri Lanka and Africa. *African Entomology* 13, 149–154.
- Ekesi S., Dimbi S. and Maniania N.K. (2007) The role of entomopathogenic fungi in the integrated management of tephritid fruit flies (Diptera: Tephritidae) with emphasis on species occurring in Africa, pp. 239–274. In *Use of Entomopathogenic Fungi in Biological Pest Management* (Edited by S. Ekesi and N.K. Maniania). Research SignPost, Kerala.
- Economopoulos A. P. and Haniotakis G. E. (1994) Advances in attractant and trapping technologies for tephritids, pp. 57–66. In *Fruit Flies and the Sterile Insect Technique* (Edited by C.O. Calkins, W. Klassen and P. Liedo). CRC Press, Boca Raton.
- Flath R. A., Cunningham R. T., Liquido N. J. and McGovern T. P. (1994) α -Ionol as attractant for trapping *Bactrocera latifrons* (Diptera: Tephritidae). *Journal of Economic Entomology* 87, 1470–1476.
- GROUT T. and WARE A. (2005) Monitoring fruit flies in 2005. Cutting edge research news from Citrus Research International No. 26.
- Heath R. R., Epsky N. D., Dueben B. D., Rizzo J. and Jeronimo F. (1997) Adding methyl-substituted ammonia derivatives to a food-based synthetic attractant on capture of Mediterranean and Mexican fruit flies (Diptera: Tephritidae). *Journal of Economic Entomology* 90, 1584–1589.
- [IAEA] International Atomic Energy Agency (2003) *Trapping Guidelines for Area-Wide Fruit Fly Programmes*. IAEA, Vienna, Austria.
- [IPPC] [International Plant Protection Convention] Webpage. International standard for phytosanitary measures. <http://www.ippc.int/>. Draft Annex 1 to ISPM No. 26-Fruit fly trapping. June 2008.
- Lux S. A., Copeland R. S., White I. M., Manrakhan A. and Billah M. K. (2003) A new invasive fruit fly species from the *Bactrocera dorsalis* (Hendel) Group detected in East Africa. *Insect Science and Its Application* 23, 355–361.
- Lux S.A., Ekesi S., Dimbi S., Mohamed S.A. and Billah M.K. (2003) Mango-infesting fruit flies in Africa: Perspectives and limitations of biological approaches to their management, pp. 277–293. In *Biological Control in IPM Systems in Africa* (Edited by P. Neuenschwander, C. Borgemeister and J. Langewald). CAB International, Wallingford.
- Mazor M., Gothilf S. and Galun R. (1987) The role of ammonia in the attraction of females of the Mediterranean fruit fly to protein hydrolysate baits. *Entomologia Experimentalis et Applicata* 43, 25–29.
- McQuate G. T. and Peck S. L. (2001) Enhancement of attraction of α -ionol to male *Bactrocera latifrons* (Diptera: Tephritidae) by addition of a synergist, cade oil. *Journal of Economic Entomology* 94, 39–46.
- McQuate G. T., Keum Y. S., Sylva C. D., Li Q. X. and Jang E. B. (2004) Active ingredients in cade oil that synergize attractiveness of α -ionol to male *Bactrocera latifrons* (Diptera: Tephritidae). *Journal of Economic Entomology* 97, 862–870.
- Mohamed S.A., Ekesi S. and Hanna R. (2009) Old and new host-parasitoid associations: Parasitization of the invasive fruit fly *Bactrocera invadens* (Diptera:

- Tephritidae) and five other African fruit fly species by *Fopius arisanus*, an Asian opiine parasitoid. *Biocontrol Science & Technology* (In press).
- Van Mele P., Vayssières J.F., Van Tellingen E. and Vrolijk J. (2007) Effects of the African weaver ant *Oecophylla longinoda* in controlling mango fruit flies (Diptera Tephritidae). *Journal of Economic Entomology* 100, 695–701.
- Vayssières J.F., Goergen G., Lokossou O., Dossa P. and Akponon C. (2005) A new *Bactrocera* species in Benin among mango fruit fly (Diptera: Tephritidae) species. *Fruits* 60, 371–377.
- Victor J. E., Koekemoer M., Fish L., Smithies S.J. and Mössmer M. (2004) Herbarium essentials: The southern African herbarium user manual. Southern African Botanical Diversity Network Report No. 25. SABONET, Pretoria.
- White I. M. and Elson-Harris M. M. (1992) *Fruit Flies of Economic Significance: Their Identification and Bionomics*. CAB International, Wallingford. 601 pp.

Suggested Further Reading

- Barnes B.N. (Ed.) (2004) *Proceedings of the 6th International Symposium on Fruit Flies of Economic Importance*. 6–10 May 2002. Stellenbosch, South Africa. Isteg Scientific Publications, South Africa. 510 pp.
- Ekesi S. and Maniania N.K. (Eds) (2007) *Use of Entomopathogenic Fungi in Biological Pest Management*. Research SignPost, Kerala.
- Ekesi S., Billah M.K., Nderitu P.W., Lux S.A. and Rwomushana I. (2009) Evidence for competitive displacement of the mango fruit fly, *Ceratitis cosyra* by the invasive fruit fly, *Bactrocera invadens* (Diptera: Tephritidae) on mango and mechanisms contributing to the displacement. *Journal of Economic Entomology* 102, 981–991.
- Ekesi S., Lux S. A. and Billah M. K. (2006a) Field comparisons of food-based synthetic attractants and traps for African fruit flies. *IAEA Technical Bulletin* 1574, 205–222.
- Ekesi S., Nderitu P. W. and Rwomushana I. (2006b) Field infestation, life history and demographic parameters of *Bactrocera invadens* Drew, Tsuruta & White, a new invasive fruit fly species in Africa. *Bulletin of Entomological Research* 96, 279–386.
- Ekesi S., Maniania N.K., Mohamed S.A and Lux S.A. (2005) Effect of different formulations of *Metarhizium anisopliae* on three tephritid fruit flies and their associated endoparasitoids. *Biological Control* 35, 83–91.
- Khamis F., Karam N., Guglielmino C.R., Ekesi S., Masiga D., De Meyer M., Kenya E.U. and Malacrida A.R. (2008) Isolation and characterization of microsatellite markers in the newly discovered invasive fruit fly pest in Africa, *Bactrocera invadens* (Diptera: Tephritidae). *Molecular Ecology Resources* 8, 1509–1511.
- McNutt D. N. (1976) *Insect Collecting in the Tropics*. Centre for Overseas Pest Research, College House, Wrights Lane, London.
- Mwatawala M.W., De Meyer M., Maundi R.H. and Maerere A.P. (2009) Host range and distribution of fruit-infesting pestiferous fruit flies (Diptera, Tephritidae) in selected areas of Central Tanzania. *Bulletin of Entomological Research* doi:10.1017/S0007485309006695 (ePublication ahead of print).

- Mwatawala M.W., De Meyer M., Makundi R.H. and Maerere A.P. (2009) Design of an ecologically-based IPM program for fruit flies (Diptera: Tephritidae) in Tanzania. *Fruits* 64, 83–90.
- Mwatawala M.W., De Meyer M., Makundi R.H. and Maerere A.P. (2009) An overview of *Bactrocera* (Diptera: Tephritidae) invasions and their speculated dormancy over native fruit fly species in Tanzania. *Journal of Entomology* 6, 18–27.
- Mwatawala M.W., De Meyer M., Makundi R.H. and Maerere A.P. (2006b) Seasonality and host utilization of the invasive fruit fly, *Bactrocera invadens* (Dipt., Tephritidae) in central Tanzania. *Journal of Applied Entomology* 130, 530–537.
- Neuenschwander P., Borgemeister C. and Langewald J. (Eds) (2003) *Biological Control in IPM Systems in Africa*. CAB International, Wallingford. 414 pp.
- Robinson A.S. and Hooper G. (Eds) (1989a) *Fruit Flies: Their Biology, Natural Enemies and Control*. *World Crop Pests* 3 (B). Elsevier Science, Amsterdam. 353 pp.
- Robinson A.S. and Hooper G. (Eds) (1989b) *Fruit Flies: Their Biology, Natural Enemies and Control*. *World Crop Pests* 3 (A). Elsevier Science, Amsterdam. 372 pp.
- Rwomushana I., Ekesi S., Gordon I. and Ogot C.K.P.O. (2008) Host plants and host plant preference studies for *Bactrocera invadens* (Diptera: Tephritidae) in Kenya, a new invasive fruit fly species in Africa. *Annals of the Entomological Society of America* 101, 331–340.
- Rwomushana I., Ekesi S., Gordon I. and Ogot C.K.P.O. (2009) Mechanisms contributing to the competitive success of the invasive fruit fly *Bactrocera invadens* over the indigenous mango fruit fly *Ceratitis cosyra*: The role of temperature and resource pre-emption. *Entomologia Experimentalis et Applicata* (Accepted).
- Walker A. K. and Crosby T. K. (1979) *The Preparation and Curation of Insects*. N. Z. Department of Scientific and Industrial Research Information Series No. 130. Auckland. 55 pp.
- Ware A. B. (2002) A comparison of fruit fly attractants used in South Africa. *South African Fruit Journal* 1, 45–51.

Sample Spreadsheet for Managing Fruit Fly Host Fruit Processing Data

Lab rearing number	Sampling date	Province	Location	Latitude	Longitude	Altitude (metres)	Plant species	Plant family	Plant identifier	Notes on collection	Detailed field note reference no.	Wild/cultivated	Number of fruits	Weight (grams)	Tephritid species 1	Tephritid species 2	Tephritid species 3	Tephritid species 4	Other insect species 1	Other insect species 2	Other insect species 3	Other insect species 4	Other insect species 5
3	6-Jun-01	Western	Kakamega Forest	0° 14.13' N	34° 51.87' E	1550	<i>Antiaris toxicaria</i>	Moraceae	RSC		1	w	34	52	<i>C. flexuosa</i>	<i>C. anonae</i>							
1	7-Jun-01	Western	Kakamega Forest	0° 12.732' N	34° 55.430' E	1570	<i>Manilkara butugi</i>	Sapotaceae	RSC	Ikuywa River	1	w	258	505									
2	7-Jun-01	Nyanza	Koru	0° 08.196' S	35° 16.861' E	1565	<i>Momordica foetida</i>	Cucurbitaceae	RSC	CRF	2	w	28	610	<i>D. sphaeristicus</i>	<i>D. limbipennis</i>							
4	11-Jun-01	Nairobi	Nairobi	1° 16.44' S	36° 48.83' E	1674	<i>Psychotria kirkii</i>	Rubiaceae	RSC	NMK	1	w	795	192									
5	11-Jun-01	Nairobi	Nairobi	1° 16.44' S	36° 48.83' E	1674	<i>Diplocyclos palmatus</i>	Cucurbitaceae	RSC	NMK	2	w	52	80	<i>D. punctatifrons</i>	<i>B. cucurbitae</i>							
6	11-Jun-01	Nairobi	Nairobi	1° 16.44' S	36° 48.83' E	1674	<i>Rothmannia urcelliformis</i>	Rubiaceae	RSC	NMK	3	w	7	338									
7	18-Jun-01	Nairobi	Nairobi	1° 14.45' S	36° 47.24' E	1774	<i>Zehneria scabra</i>	Cucurbitaceae	RSC	Kitisuru Rd.	1	w	425	56	<i>D. triater</i>								
8	18-Jun-01	Nairobi	Nairobi	1° 13.27' S	36° 53.78' E	1627	<i>Ziziphus sp.</i>	Rhamnaceae	RSC	Kasarani, nr icipe	2	w	124	488									
9	18-Jun-01	Nairobi	Nairobi	1° 15.61' S	36° 49.76' E	1697	<i>Strychnos mitis</i>	Loganiaceae	RSC	City Park forest	3	w	119	127	<i>C. querita</i>								
10	18-Jun-01	Nairobi	Nairobi	1° 15.61' S	36° 49.76' E	1697	<i>Ekebergia capensis</i>	Meliaceae	RSC	City Park forest	4	w	148	340									

RSC, R. S. Copeland; NMK, National Museums of Kenya ; CRF, Coffee Research Foundation.

Trapping Service Record

Country:.....

Date	Farm name/Location	Trap No.	Serviced (√ / x)	Rebait (√ / x)	Specimen caught (Yes/No)	Number of specimens	Comments (e.g. lost/broken)



Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

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Burceracea sp.	Burceraceae																										
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<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

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Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Diospyros digyna	Ebenaceae																										
Diospyros abyssinica	Ebenaceae																										
Diospyros kaki	Ebenaceae																										
Diospyros mespiliiformis	Ebenaceae																										
Diospyros montana	Ebenaceae																										
Diospyros pallens	Ebenaceae																										
Diospyros pubescens	Ebenaceae																										
Dorstenia virginiana	Moraceae																										
Dorstenia sp.	Moraceae																										
Dovialis caffra	Flacourtiaceae																										
Dovialis sp.	Flacourtiaceae																										
Dovyalis hebecarpa	Flacourtiaceae																										
Dracontomelon dao	Anacardiaceae																										
Dracontomelon sp.	Anacardiaceae																										
Drypetes battiscombei	Euphorbiaceae																										
Drypetes cf spinoso-dentata var. longipedunculata	Euphorbiaceae																										
Drypetes gerrardii	Euphorbiaceae																										
Drypetes gossweileri	Euphorbiaceae																										
Drypetes natalensis	Euphorbiaceae																										
Drypetes sp.	Euphorbiaceae																										
Durio zibethinus	Bombacaceae																										
Ehretia cymosa	Boraginaceae																										
Ekebergia capensis	Meliaceae																										
Elaeodendron schweinfurthianum	Celastraceae																										
Englerophytum oblongeolatum	Sapotaceae																										
Eriobotrya japonica	Rosaceae																										
Euclea divinorum	Ebenaceae																										
Euclea sp.	Ebenaceae																										

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Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

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Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

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Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Murraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

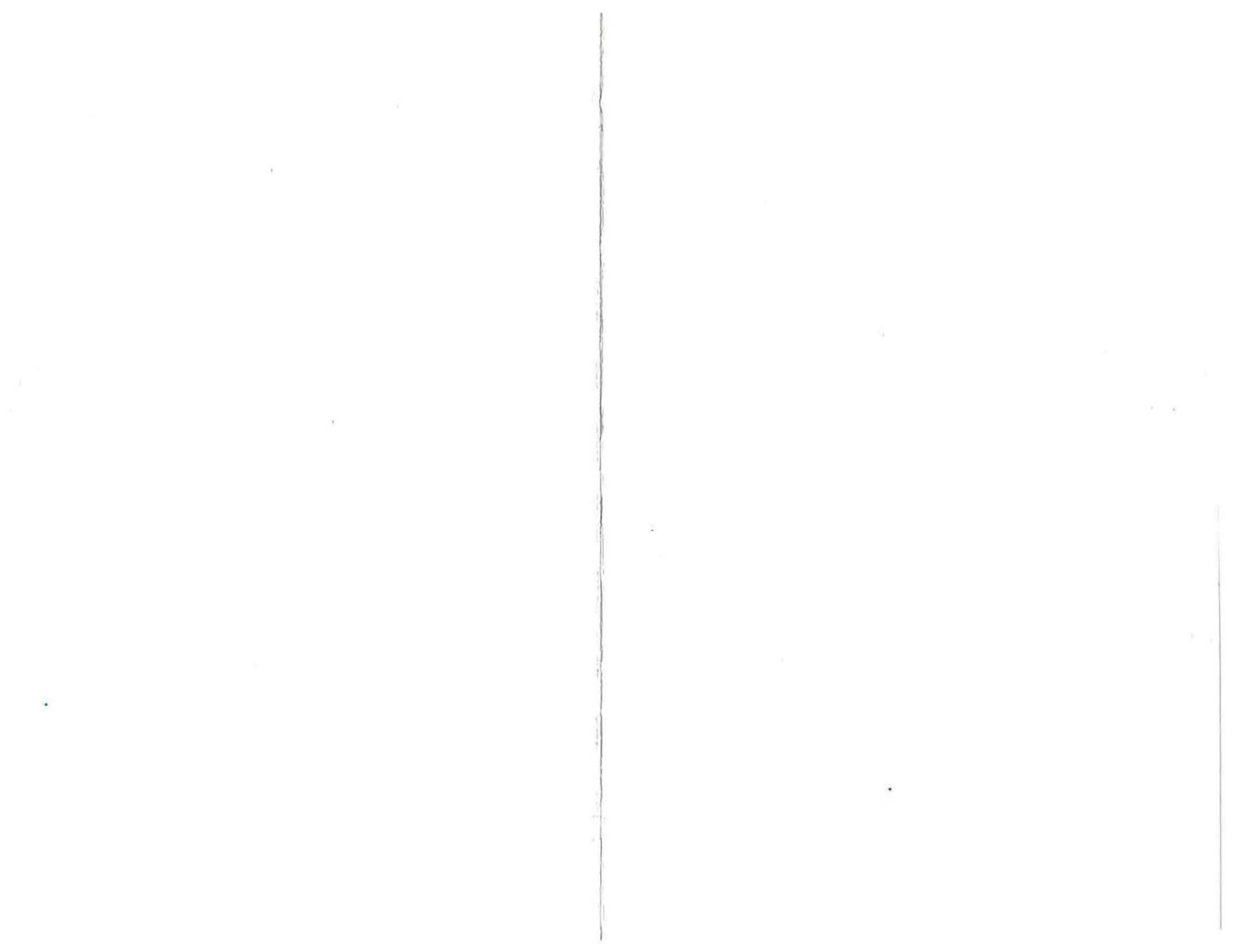
Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										


Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data





The development of horticultural industries to meet both domestic consumption and export to lucrative markets abroad is an important component of the economic development of African countries. However, tephritid fruit flies constitute a major constraint to increased production of fruits and vegetables in Africa. They cause enormous losses through direct feeding damage and loss of market opportunities through imposition of strict quarantine by importing countries to prevent entry and establishment of fruit flies.

At the concluding meeting of the first phase of an FAO/TCF project on surveillance and management of the invasive fruit fly species *Bactrocera invadens* in East Africa, and the Dutch Programme for Cooperation with International Institutions (Netherlands-SII) and IFAD-sponsored International Group Training Course on Fruit Fly Management in October 2005, representatives of National Plant Protection Organisations (NPPOs) of participating countries expressed the need for development of a field manual for management of economically important tephritid fruit flies in Africa in view of the fruit fly-related trans-boundary invasions arising from increased travel and trade in fruits and vegetables. This view was further supported by the USDA-APHIS and BMZ/GTZ (through the Mango IPM Project) who concur to the usefulness of the 1st edition and have generously funded production of this 2nd edition.

The manual provides information on the life cycle, damage symptoms, species composition, distribution and host plants of major fruit flies attacking fruits and vegetables in Africa. The purpose, tools and methodology for fruit fly monitoring, suppression and host fruit processing and handling are also comprehensively covered. Additionally, brief sections on safety precautions during monitoring and suppression, and packaging, handling and shipment of specimens to facilitate identification are provided. The field guide also provides a simple, user-friendly taxonomic key to all the common fruit flies to allow for rapid identification of the major species found on fruits and vegetables in Africa. In addition to the four invasive *Bactrocera* species on the continent, other morphologically similar and closely related species to *B. invadens* such as *B. dorsalis*, *B. kandiensis* and *B. correcta* have been included in this edition. Fortunately, these species are also strongly attracted to methyl eugenol, and it is therefore important that methyl eugenol catches are carefully examined (and not assumed to be only *B. invadens*) to avoid the possibility of any new detections going unnoticed.

This is an indispensable reference book for agricultural scientists, extension workers and quarantine specialists involved in fruit fly monitoring, detection and management.

ISBN: 92 9064 209 2

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagellaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seafortianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										




References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fornicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae									■	■																
Momordica balsamina	Cucurbitaceae															■	■					■	■				
Momordica calantha	Cucurbitaceae			■	■									■	■	■	■					■	■	■	■		
Momordica cochinchinensis	Cucurbitaceae															■	■										
Momordica charantia	Cucurbitaceae																	■	■			■	■				
Monanthotaxis fomicata	Annonaceae					■	■																				
Monodora grandidieri	Annonaceae					■	■			■	■																
Muntingiacalabura	Elaeocarpaceae									■	■																
Morus alba	Moraceae									■	■																
Morus mesozygia	Moraceae							■	■																		
Muraya paniculata	Rutaceae					■	■			■	■																
Musa nana	Musaceae					■	■																				
Musa x paradisiaca	Musaceae					■	■									■	■	■	■								
Musa sp.	Musaceae																	■	■								
Myrciaria cauliflora	Myrtaceae									■	■																
Myrianthus arboreus	Cecropiaceae			■	■	■	■		■	■	■	■															
Myrianthus sp.	Cecropiaceae							■	■																		
Nephelium lappaceum	Sapindaceae							■	■																		
Olea europaea	Oleaceae									■	■																
Olea europaea ssp africana	Oleaceae									■	■																
Olea woodiana	Oleaceae									■	■																
Omaralia calycina	Rubiaceae							■	■																		
Opilia amentacea	Opiliaceae									■	■																
Opuntia ficus-indica	Cactaceae					■	■			■	■																
Opuntia tuna	Cactaceae					■	■			■	■																
Opuntia vulgaris	Cactaceae									■	■																
Opuntia sp.	Cactaceae									■	■																
Oxyanthus zanguebaricus	Rubiaceae									■	■																
Pachystela excelsa	Sapotaceae					■	■																				
Pancovia laurentii	Sapindaceae							■	■																		

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■									■	■						
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■									■	■						
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■									■	■						
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										




References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Artocarpus altilis</i>	Moraceae																										
<i>Artocarpus heterophyllus</i>	Moraceae																										
<i>Artocarpus</i> sp.	Moraceae																										
<i>Asparagus officinalis</i>	Liliaceae																										
<i>Asparagus</i> sp.	Liliaceae																										
<i>Averrhoa bilimbi</i>	Oxalidaceae																										
<i>Averrhoa carambola</i>	Oxalidaceae																										
<i>Azima tetracantha</i>	Salvadoraceae																										
<i>Benincasa hispida</i>	Cucurbitaceae																										
<i>Berberis holstii</i>	Berberidaceae																										
<i>Blighia sapida</i>	Sapindaceae																										
<i>Bourreria petiolaris</i>	Boraginaceae																										
<i>Brassica juncea</i>	Brassicaceae																										
<i>Brassica oleracea</i>	Brassicaceae																										
<i>Brucea antidysenterica</i>	Simaroubaceae																										
<i>Cajanus cajan</i>	Fabaceae																										
<i>Calophyllum inophyllum</i>	Clusiaceae																										
<i>Calophyllum tamahaca</i>	Clusiaceae																										
<i>Calotropis procera</i>	Asclepiadaceae																										
<i>Cananga odorata</i>	Annonaceae																										
<i>Capparis sepiaria</i>	Capparaceae																										
<i>Capparis sepiaria</i> var. <i>citrifolia</i>	Capparaceae																										
<i>Capparis</i> sp.	Capparaceae																										
<i>Capsicum annuum</i>	Solanaceae																										
<i>Capsicum frutescens</i>	Solanaceae																										
<i>Capsicum</i> sp.	Solanaceae																										
<i>Carica cauliflora</i>	Caricaceae																										
<i>Carica papaya</i>	Caricaceae																										
<i>Carissa carandas</i>	Apocynaceae																										
<i>Carissa edulis</i>	Apocynaceae																										
<i>Carissa grandiflora</i>	Apocynaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fornicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■									■	■						
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
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Annona cherimola	Annonaceae																										
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Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
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Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
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Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Eugenia paniculata</i>	Myrtaceae																										
<i>Eugenia uniflora</i>	Myrtaceae																										
<i>Feijoa sellowiana</i>	Myrtaceae																										
<i>Ficus carica</i>	Moraceae																										
<i>Ficus sycomorus</i>	Moraceae																										
<i>Ficus</i> sp.	Moraceae																										
<i>Filicium decipiens</i>	Sapindaceae																										
<i>Flacourtia indica</i>	Flacourtiaceae																										
<i>Flacourtia</i> sp.	Flacourtiaceae																										
<i>Flagellaria guineensis</i>	Flagellariaceae																										
<i>Flueggea virosa</i>	Euphorbiaceae																										
<i>Fortunella japonica</i>	Rutaceae																										
<i>Fragaria chiloensis</i>	Rosaceae																										
<i>Garcinia livingstonei</i>	Clusiaceae																										
<i>Garcinia mangostana</i>	Clusiaceae																										
<i>Garcinia mannii</i>	Clusiaceae																										
<i>Gloriosa</i> sp.	Liliaceae																										
<i>Gossypium</i> sp.	Malvaceae																										
<i>Grewia asiatica</i>	Tiliaceae																										
<i>Grewia trichocarpa</i>	Tiliaceae																										
<i>Guettarda speciosa</i>	Rubiaceae																										
<i>Harpephyllum caffrum</i>	Anacardiaceae																										
<i>Harrisonia abyssinica</i>	Simaroubaceae																										
<i>Hylocereus undatus</i>	Cactaceae																										
<i>Inga laurina</i>	Fabaceae																										
<i>Irvingia gabonensis</i>	Irvingiaceae																										
<i>Juglans hindsii</i>	Juglandaceae																										
<i>Juglans hindsii</i>	Juglandaceae																										
<i>Lablab purpureus</i>	Fabaceae																										
<i>Lagenaria siceraria</i>	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										




Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seafortianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Artocarpus altilis	Moraceae																										
Artocarpus heterophyllus	Moraceae																										
Artocarpus sp.	Moraceae																										
Asparagus officinalis	Liliaceae																										
Asparagus sp.	Liliaceae																										
Averrhoa bilimbi	Oxalidaceae																										
Averrhoa carambola	Oxalidaceae																										
Azima tetracantha	Salvadoraceae																										
Benincasa hispida	Cucurbitaceae																										
Berberis holstii	Berberidaceae																										
Blighia sapida	Sapindaceae																										
Bourreria petiolaris	Boraginaceae																										
Brassica juncea	Brassicaceae																										
Brassica oleracea	Brassicaceae																										
Brucea antidysenterica	Simaroubaceae																										
Cajanus cajan	Fabaceae																										
Calophyllum inophyllum	Clusiaceae																										
Calophyllum tamahaca	Clusiaceae																										
Calotropis procera	Asclepiadaceae																										
Cananga odorata	Annonaceae																										
Capparis sepiaria	Capparaceae																										
Capparis sepiaria var. citrifolia	Capparaceae																										
Capparis sp.	Capparaceae																										
Capsicum annuum	Solanaceae																										
Capsicum frutescens	Solanaceae																										
Capsicum sp.	Solanaceae																										
Carica cauliflora	Caricaceae																										
Carica papaya	Caricaceae																										
Carissa carandas	Apocynaceae																										
Carissa edulis	Apocynaceae																										
Carissa grandiflora	Apocynaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae									■	■																
Momordica balsamina	Cucurbitaceae															■	■					■	■				
Momordica calantha	Cucurbitaceae			■	■									■	■	■	■					■	■	■	■		
Momordica cochinchinensis	Cucurbitaceae															■	■										
Momordica charantia	Cucurbitaceae																	■	■			■	■				
Monanthotaxis fomicata	Annonaceae					■	■																				
Monodora grandidieri	Annonaceae					■	■			■	■																
Muntingiacalabura	Elaeocarpaceae									■	■																
Morus alba	Moraceae									■	■																
Morus mesozygia	Moraceae							■	■																		
Muraya paniculata	Rutaceae					■	■			■	■																
Musa nana	Musaceae					■	■																				
Musa x paradisiaca	Musaceae					■	■									■	■	■	■								
Musa sp.	Musaceae																	■	■								
Myrciaria cauliflora	Myrtaceae									■	■																
Myrianthus arboreus	Cecropiaceae			■	■	■	■		■	■	■	■															
Myrianthus sp.	Cecropiaceae							■	■																		
Nephelium lappaceum	Sapindaceae							■	■																		
Olea europaea	Oleaceae									■	■																
Olea europaea ssp africana	Oleaceae									■	■																
Olea woodiana	Oleaceae									■	■																
Omaralia calycina	Rubiaceae							■	■																		
Opilia amentacea	Opiliaceae									■	■																
Opuntia ficus-indica	Cactaceae					■	■			■	■																
Opuntia tuna	Cactaceae					■	■			■	■																
Opuntia vulgaris	Cactaceae									■	■																
Opuntia sp.	Cactaceae									■	■																
Oxyanthus zanguebaricus	Rubiaceae									■	■																
Pachystela excelsa	Sapotaceae					■	■																				
Pancovia laurentii	Sapindaceae							■	■																		

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagellaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblancoatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exultentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										




References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										




Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagellaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblancoatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae									■	■																
Momordica balsamina	Cucurbitaceae															■	■					■	■				
Momordica calantha	Cucurbitaceae			■	■									■	■	■	■					■	■	■	■		
Momordica cochinchinensis	Cucurbitaceae															■	■										
Momordica charantia	Cucurbitaceae																	■	■			■	■				
Monanthotaxis fomicata	Annonaceae					■	■																				
Monodora grandidieri	Annonaceae					■	■			■	■																
Muntingiacalabura	Elaeocarpaceae									■	■																
Morus alba	Moraceae									■	■																
Morus mesozygia	Moraceae							■	■																		
Muraya paniculata	Rutaceae					■	■			■	■																
Musa nana	Musaceae					■	■																				
Musa x paradisiaca	Musaceae					■	■									■	■	■	■								
Musa sp.	Musaceae																	■	■								
Myrciaria cauliflora	Myrtaceae									■	■																
Myrianthus arboreus	Cecropiaceae			■	■	■	■		■	■	■	■															
Myrianthus sp.	Cecropiaceae							■	■																		
Nephelium lappaceum	Sapindaceae							■	■																		
Olea europaea	Oleaceae									■	■																
Olea europaea ssp africana	Oleaceae									■	■																
Olea woodiana	Oleaceae									■	■																
Omaralia calycina	Rubiaceae							■	■																		
Opilia amentacea	Opiliaceae									■	■																
Opuntia ficus-indica	Cactaceae					■	■			■	■																
Opuntia tuna	Cactaceae					■	■			■	■																
Opuntia vulgaris	Cactaceae									■	■																
Opuntia sp.	Cactaceae									■	■																
Oxyanthus zanguebaricus	Rubiaceae									■	■																
Pachystela excelsa	Sapotaceae					■	■																				
Pancovia laurentii	Sapindaceae							■	■																		

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seafortianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Artocarpus altilis</i>	Moraceae																										
<i>Artocarpus heterophyllus</i>	Moraceae																										
<i>Artocarpus</i> sp.	Moraceae																										
<i>Asparagus officinalis</i>	Liliaceae																										
<i>Asparagus</i> sp.	Liliaceae																										
<i>Averrhoa bilimbi</i>	Oxalidaceae																										
<i>Averrhoa carambola</i>	Oxalidaceae																										
<i>Azima tetracantha</i>	Salvadoraceae																										
<i>Benincasa hispida</i>	Cucurbitaceae																										
<i>Berberis holstii</i>	Berberidaceae																										
<i>Blighia sapida</i>	Sapindaceae																										
<i>Bourreria petiolaris</i>	Boraginaceae																										
<i>Brassica juncea</i>	Brassicaceae																										
<i>Brassica oleracea</i>	Brassicaceae																										
<i>Brucea antidysenterica</i>	Simaroubaceae																										
<i>Cajanus cajan</i>	Fabaceae																										
<i>Calophyllum inophyllum</i>	Clusiaceae																										
<i>Calophyllum tamahaca</i>	Clusiaceae																										
<i>Calotropis procera</i>	Asclepiadaceae																										
<i>Cananga odorata</i>	Annonaceae																										
<i>Capparis sepiaria</i>	Capparaceae																										
<i>Capparis sepiaria</i> var. <i>citrifolia</i>	Capparaceae																										
<i>Capparis</i> sp.	Capparaceae																										
<i>Capsicum annuum</i>	Solanaceae																										
<i>Capsicum frutescens</i>	Solanaceae																										
<i>Capsicum</i> sp.	Solanaceae																										
<i>Carica cauliflora</i>	Caricaceae																										
<i>Carica papaya</i>	Caricaceae																										
<i>Carissa carandas</i>	Apocynaceae																										
<i>Carissa edulis</i>	Apocynaceae																										
<i>Carissa grandiflora</i>	Apocynaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus ameniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticos</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

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Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
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Adenia lobata	Passifloraceae																										
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Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
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Artabotrys monteiroae	Annonaceae																										

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Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
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Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
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Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
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Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
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Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
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<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblancoatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Eugenia paniculata</i>	Myrtaceae																										
<i>Eugenia uniflora</i>	Myrtaceae																										
<i>Feijoa sellowiana</i>	Myrtaceae																										
<i>Ficus carica</i>	Moraceae																										
<i>Ficus sycomorus</i>	Moraceae																										
<i>Ficus</i> sp.	Moraceae																										
<i>Filicium decipiens</i>	Sapindaceae																										
<i>Flacourtia indica</i>	Flacourtiaceae																										
<i>Flacourtia</i> sp.	Flacourtiaceae																										
<i>Flagellaria guineensis</i>	Flagellariaceae																										
<i>Flueggea virosa</i>	Euphorbiaceae																										
<i>Fortunella japonica</i>	Rutaceae																										
<i>Fragaria chiloensis</i>	Rosaceae																										
<i>Garcinia livingstonei</i>	Clusiaceae																										
<i>Garcinia mangostana</i>	Clusiaceae																										
<i>Garcinia mannii</i>	Clusiaceae																										
<i>Gloriosa</i> sp.	Liliaceae																										
<i>Gossypium</i> sp.	Malvaceae																										
<i>Grewia asiatica</i>	Tiliaceae																										
<i>Grewia trichocarpa</i>	Tiliaceae																										
<i>Guettarda speciosa</i>	Rubiaceae																										
<i>Harpephyllum caffrum</i>	Anacardiaceae																										
<i>Harrisonia abyssinica</i>	Simaroubaceae																										
<i>Hylocereus undatus</i>	Cactaceae																										
<i>Inga laurina</i>	Fabaceae																										
<i>Irvingia gabonensis</i>	Irvingiaceae																										
<i>Juglans hindsii</i>	Juglandaceae																										
<i>Juglans hindsii</i>	Juglandaceae																										
<i>Lablab purpureus</i>	Fabaceae																										
<i>Lagenaria siceraria</i>	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References: ■ De Meyer et al.(2002), ■ White and Elson-Harris (1994), ■ Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiŕae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										




Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblancoatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■									■	■						
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seafortianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagellaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seafortianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										




References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										




Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■									■	■						
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seafortianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										




References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
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Arbustus unedo	Ericaceae																										
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Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fornicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										




Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fornicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagellaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblongeolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagellaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										




References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiŕae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblancheolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										



Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleyanum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Table 1. Checklist of Host Plants of Some Major Tephritid Fruit Flies in Africa

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Burceracea sp.	Burceraceae																										
Guttiiferae sp.	Clusiaceae																										
Acca sellowiana	Myrtaceae																										
Acokanthera cf oppositifolia	Apocynaceae																										
Acokanthera oppositifolia	Apocynaceae																										
Acokanthera schimperi	Apocynaceae																										
Acokanthera sp.	Apocynaceae																										
Adenia lobata	Passifloraceae																										
Aegle marmelos	Rutaceae																										
Allium cepa	Rutaceae																										
Albemoschus asculentus	Malvaceae																										
Allophylus pervillei	Sapindaceae																										
Anacardium occidentale	Anacardiaceae																										
Ananas comosus	Bromeliaceae																										
Angylocalyx braunii	Fabaceae																										
Anisophyllea laurina	Anisophylleaceae																										
Annona cherimola	Annonaceae																										
Annona muricata	Annonaceae																										
Annona reticulata	Annonaceae																										
Annona senegalensis	Annonaceae																										
Annona sp.	Annonaceae																										
Annona squamosa	Annonaceae																										
Antidesma venosum	Euphorbiaceae																										
Antriaris africana	Moraceae																										
Antriaris toxicaria	Moraceae																										
Arbustus unedo	Ericaceae																										
Argania spinosa	Sapotaceae																										
Artabotrys monteiroae	Annonaceae																										

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	<i>C. cosyra</i>		<i>C. fasciventris</i>		<i>C. rosa</i>		<i>C. anonae</i>		<i>C. capitata</i>		<i>C. quinaria</i>		<i>B. zonata</i>		<i>B. cucurbitae</i>		<i>B. invadens</i>		<i>B. latifrons</i>		<i>D. ciliatus</i>		<i>D. punctatifrons</i>		<i>D. vertebratus</i>	
<i>Citrus sinensis</i>	Rutaceae																										
<i>Citrus</i> sp.	Rutaceae																										
<i>Citrus x paradisi</i>	Rutaceae																										
<i>Citrus x tangelo</i>	Rutaceae																										
<i>Clausena anisata</i>	Rutaceae																										
<i>Clausena lansium</i>	Rutaceae																										
<i>Coccinia grandis</i>	Cucurbitaceae																										
<i>Coccinia microphylla</i>	Cucurbitaceae																										
<i>Coccoloba uvifera</i>	Polygonaceae																										
<i>Coffea arabica</i>	Rubiaceae																										
<i>Coffea canephora</i>	Rubiaceae																										
<i>Coffea liberica</i>	Rubiaceae																										
<i>Coffea</i> sp.	Rubiaceae																										
<i>Cola natalensis</i>	Sterculiaceae																										
<i>Corallocarpus ellipticus</i>	Cucurbitaceae																										
<i>Cordyla africana</i>	Fabaceae																										
<i>Cucumeropsis mannii</i>	Cucurbitaceae																										
<i>Cucumis dipsaceus</i>	Cucurbitaceae																										
<i>Cucumis melo</i>	Cucurbitaceae																										
<i>Cucumis metuliferus</i>	Cucurbitaceae																										
<i>Cucumis sativus</i>	Cucurbitaceae																										
<i>Cucurbita maxima</i>	Cucurbitaceae																										
<i>Cucurbita moschata</i>	Cucurbitaceae																										
<i>Cucurbita pepo</i>	Cucurbitaceae																										
<i>Cucurbita</i> sp.	Cucurbitaceae																										
<i>Cydonia oblonga</i>	Rosaceae																										
<i>Cydonia vulgaris</i>	Rosaceae																										
<i>Cynometra</i> sp.	Fabaceae																										
<i>Cyphomandra crassicaulis</i>	Solanaceae																										
<i>Dichapetalum bangii</i>	Dichapetalaceae																										
<i>Dimocarpus longan</i>	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedunculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblanceolatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										




Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Pancovia turbinata	Sapindaceae																										
Panda oleosa	Pandaceae																										
Parmentiera aculeata	Bignoniaceae																										
Passiflora caerulea	Passifloraceae																										
Passiflora cf subpeltata	Passifloraceae																										
Passiflora edulis	Passifloraceae																										
Passiflora foetida	Passifloraceae																										
Passiflora laurifolia	Passifloraceae																										
Passiflora sp.	Passifloraceae																										
Passiflora suberosa	Passifloraceae																										
Passiflora quadrangularis	Passifloraceae																										
Pentahopalopilia umbellulata	Opiliaceae																										
Peponium mackenii	Cucurbitaceae																										
Pereskia aculeata	Cactaceae																										
Persea americana	Lauraceae																										
Persea gratissima	Lauraceae																										
Phaseolus sp.	Fabaceae																										
Phaseolus lanatus	Fabaceae																										
Phaseolus vulgaris	Fabaceae																										
Phoenix dactylifera	Arecaceae																										
Phyllanthus acidus	Euphorbiaceae																										
Physalis peruviana	Solanaceae																										
Physalis dioica	Solanaceae																										
Pithecellobium dulce	Fabaceae																										
Podocarpus elongatus	Podocarpaceae																										
Polysphaeria parvifolia	Rubiaceae																										
Pouteria altissima	Sapotaceae																										
Pouteria campechiana	Sapotaceae																										
Pouteria sapota	Sapotaceae																										
Pouteria usambarensis	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monotanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data

Botanical names of host plants	Families	C. cosyra	C. fasciventris	C. rosa	C. anonae	C. capitata	C. quinaria	B. zonata	B. cucurbitae	B. invadens	B. latifrons	D. ciliatus	D. punctatifrons	D. vertebratus
<i>Artocarpus altilis</i>	Moraceae													
<i>Artocarpus heterophyllus</i>	Moraceae													
<i>Artocarpus</i> sp.	Moraceae													
<i>Asparagus officinalis</i>	Liliaceae													
<i>Asparagus</i> sp.	Liliaceae													
<i>Averrhoa bilimbi</i>	Oxalidaceae													
<i>Averrhoa carambola</i>	Oxalidaceae													
<i>Azima tetracantha</i>	Salvadoraceae													
<i>Benincasa hispida</i>	Cucurbitaceae													
<i>Berberis holstii</i>	Berberidaceae													
<i>Blighia sapida</i>	Sapindaceae													
<i>Bourreria petiolaris</i>	Boraginaceae													
<i>Brassica juncea</i>	Brassicaceae													
<i>Brassica oleracea</i>	Brassicaceae													
<i>Brucea antidysenterica</i>	Simaroubaceae													
<i>Cajanus cajan</i>	Fabaceae													
<i>Calophyllum inophyllum</i>	Clusiaceae													
<i>Calophyllum tamahaca</i>	Clusiaceae													
<i>Calotropis procera</i>	Asclepiadaceae													
<i>Cananga odorata</i>	Annonaceae													
<i>Capparis sepiaria</i>	Capparaceae													
<i>Capparis sepiaria</i> var. <i>citriolia</i>	Capparaceae													
<i>Capparis</i> sp.	Capparaceae													
<i>Capsicum annuum</i>	Solanaceae													
<i>Capsicum frutescens</i>	Solanaceae													
<i>Capsicum</i> sp.	Solanaceae													
<i>Carica cauliflora</i>	Caricaceae													
<i>Carica papaya</i>	Caricaceae													
<i>Carissa carandas</i>	Apocynaceae													
<i>Carissa edulis</i>	Apocynaceae													
<i>Carissa grandiflora</i>	Apocynaceae													

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Carissa longiflora	Apocynaceae																										
Carissa sp.	Apocynaceae																										
Carissa tetramera	Apocynaceae																										
Casimiroa edulis	Rutaceae																										
Cereus peruvianus	Cactaceae																										
Chrysobalanus elliptus	Chrysobalanaceae																										
Chrysobalanus icaco	Chrysobalanaceae																										
Chrysobalanus sp.	Chrysobalanaceae																										
Chrysophyllum albidum	Sapotaceae																										
Chrysophyllum argyrophyllum	Sapotaceae																										
Chrysophyllum cainito	Sapotaceae																										
Chrysophyllum carpussum	Sapotaceae																										
Chrysophyllum magalismontanum	Sapotaceae																										
Chrysophyllum natalense	Sapotaceae																										
Chrysophyllum oliviform	Sapotaceae																										
Chrysophyllum viridifolium	Sapotaceae																										
Chrysophyllum sp.	Sapotaceae																										
Cinnamomum verum	Lauraceae																										
Citroncirus webberi	Rutaceae																										
Citrullus colocynthis	Cucurbitaceae																										
Citrullus lanatus	Cucurbitaceae																										
Citrus aurantifolia	Rutaceae																										
Citrus aurantium	Rutaceae																										
Citrus japonica	Rutaceae																										
Citrus limetta	Rutaceae																										
Citrus limon	Rutaceae																										
Citrus maxima	Rutaceae																										
Citrus medica	Rutaceae																										
Citrus nobilis	Rutaceae																										
Citrus reticulata	Rutaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Citrus sinensis	Rutaceae																										
Citrus sp.	Rutaceae																										
Citrus x paradisi	Rutaceae																										
Citrus x tangelo	Rutaceae																										
Clausena anisata	Rutaceae																										
Clausena lansium	Rutaceae																										
Coccinia grandis	Cucurbitaceae																										
Coccinia microphylla	Cucurbitaceae																										
Coccoloba uvifera	Polygonaceae																										
Coffea arabica	Rubiaceae																										
Coffea canephora	Rubiaceae																										
Coffea liberica	Rubiaceae																										
Coffea sp.	Rubiaceae																										
Cola natalensis	Sterculiaceae																										
Corallocarpus ellipticus	Cucurbitaceae																										
Cordyla africana	Fabaceae																										
Cucumeropsis mannii	Cucurbitaceae																										
Cucumis dipsaceus	Cucurbitaceae																										
Cucumis melo	Cucurbitaceae																										
Cucumis metuliferus	Cucurbitaceae																										
Cucumis sativus	Cucurbitaceae																										
Cucurbita maxima	Cucurbitaceae																										
Cucurbita moschata	Cucurbitaceae																										
Cucurbita pepo	Cucurbitaceae																										
Cucurbita sp.	Cucurbitaceae																										
Cydonia oblonga	Rosaceae																										
Cydonia vulgaris	Rosaceae																										
Cynometra sp.	Fabaceae																										
Cyphomandra crassicaulis	Solanaceae																										
Dichapetalum bangii	Dichapetalaceae																										
Dimocarpus longan	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Diospyros digyna</i>	Ebenaceae																										
<i>Diospyros abyssinica</i>	Ebenaceae																										
<i>Diospyros kaki</i>	Ebenaceae																										
<i>Diospyros mespiliiformis</i>	Ebenaceae																										
<i>Diospyros montana</i>	Ebenaceae																										
<i>Diospyros pallens</i>	Ebenaceae																										
<i>Diospyros pubescens</i>	Ebenaceae																										
<i>Dorstenia virginiana</i>	Moraceae																										
<i>Dorstenia</i> sp.	Moraceae																										
<i>Dovialis caffra</i>	Flacourtiaceae																										
<i>Dovialis</i> sp.	Flacourtiaceae																										
<i>Dovyalis hebecarpa</i>	Flacourtiaceae																										
<i>Dracontomelon dao</i>	Anacardiaceae																										
<i>Dracontomelon</i> sp.	Anacardiaceae																										
<i>Drypetes battiscombei</i>	Euphorbiaceae																										
<i>Drypetes</i> cf <i>spinoso-dentata</i> var. <i>longipedonculata</i>	Euphorbiaceae																										
<i>Drypetes gerrardii</i>	Euphorbiaceae																										
<i>Drypetes gossweileri</i>	Euphorbiaceae																										
<i>Drypetes natalensis</i>	Euphorbiaceae																										
<i>Drypetes</i> sp.	Euphorbiaceae																										
<i>Durio zibethinus</i>	Bombacaceae																										
<i>Ehretia cymosa</i>	Boraginaceae																										
<i>Ekebergia capensis</i>	Meliaceae																										
<i>Elaeodendron schweinfurthianum</i>	Celastraceae																										
<i>Englerophytum oblancoatum</i>	Sapotaceae																										
<i>Eriobotrya japonica</i>	Rosaceae																										
<i>Euclea divinorum</i>	Ebenaceae																										
<i>Euclea</i> sp.	Ebenaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Eugenia paniculata	Myrtaceae																										
Eugenia uniflora	Myrtaceae																										
Feijoa sellowiana	Myrtaceae																										
Ficus carica	Moraceae																										
Ficus sycomorus	Moraceae																										
Ficus sp.	Moraceae																										
Filicium decipiens	Sapindaceae																										
Flacourtia indica	Flacourtiaceae																										
Flacourtia sp.	Flacourtiaceae																										
Flagellaria guineensis	Flagellariaceae																										
Flueggea virosa	Euphorbiaceae																										
Fortunella japonica	Rutaceae																										
Fragaria chiloensis	Rosaceae																										
Garcinia livingstonei	Clusiaceae																										
Garcinia mangostana	Clusiaceae																										
Garcinia mannii	Clusiaceae																										
Gloriosa sp.	Liliaceae																										
Gossypium sp.	Malvaceae																										
Grewia asiatica	Tiliaceae																										
Grewia trichocarpa	Tiliaceae																										
Guettarda speciosa	Rubiaceae																										
Harpephyllum caffrum	Anacardiaceae																										
Harrisonia abyssinica	Simaroubaceae																										
Hylocereus undatus	Cactaceae																										
Inga laurina	Fabaceae																										
Irvingia gabonensis	Irvingiaceae																										
Juglans hindsii	Juglandaceae																										
Juglans hindsii	Juglandaceae																										
Lablab purpureus	Fabaceae																										
Lagenaria siceraria	Cucurbitaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Lamprothamnus zanguebaricus	Rubiaceae																										
Landolphia florida	Apocynaceae																										
Landolphia kirkii	Apocynaceae																										
Landolphia sp.	Apocynaceae																										
Leptactina platyphylla	Rubiaceae																										
Lettowianthus stellatus	Annonaceae																										
Litchi chinensis	Sapindaceae																										
Ludia mauritiana	Flacourtiaceae																										
Luffa acutangula	Cucurbitaceae																										
Luffa aegyptiaca	Cucurbitaceae																										
Lycium campanulatum	Solanaceae																										
Lycium sp.	Solanaceae																										
Lycopersicum esculentum	Solanaceae																										
Malpighia glabra	Malpighiaceae																										
Malus domestica	Rosaceae																										
Malus pumila	Rosaceae																										
Mammea americana	Clusiaceae																										
Mangifera indica	Anacardiaceae																										
Manilkara butugi	Sapotaceae																										
Manilkara sansibarensis	Sapotaceae																										
Manilkara sulcata	Sapotaceae																										
Manilkara zapota	Sapotaceae																										
Maerua sp.	Capparaceae																										
Mimusops bagshawei	Sapotaceae																										
Mimusops caffra	Sapotaceae																										
Mimusops elengi	Sapotaceae																										
Mimusops kirkii	Sapotaceae																										
Mimusops kummel	Sapotaceae																										
Mimusops obtusifolia	Sapotaceae																										
Mimusops sp.	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Mimusops zeyheri	Sapotaceae																										
Momordica balsamina	Cucurbitaceae																										
Momordica calantha	Cucurbitaceae																										
Momordica cochinchinensis	Cucurbitaceae																										
Momordica charantia	Cucurbitaceae																										
Monanthotaxis fomicata	Annonaceae																										
Monodora grandidieri	Annonaceae																										
Muntingiacalabura	Elaeocarpaceae																										
Morus alba	Moraceae																										
Morus mesozygia	Moraceae																										
Muraya paniculata	Rutaceae																										
Musa nana	Musaceae																										
Musa x paradisiaca	Musaceae																										
Musa sp.	Musaceae																										
Myrciaria cauliflora	Myrtaceae																										
Myrianthus arboreus	Cecropiaceae																										
Myrianthus sp.	Cecropiaceae																										
Nephelium lappaceum	Sapindaceae																										
Olea europaea	Oleaceae																										
Olea europaea ssp africana	Oleaceae																										
Olea woodiana	Oleaceae																										
Omaralia calycina	Rubiaceae																										
Opilia amentacea	Opiliaceae																										
Opuntia ficus-indica	Cactaceae																										
Opuntia tuna	Cactaceae																										
Opuntia vulgaris	Cactaceae																										
Opuntia sp.	Cactaceae																										
Oxyanthus zanguebaricus	Rubiaceae																										
Pachystela excelsa	Sapotaceae																										
Pancovia laurentii	Sapindaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pancovia turbinata</i>	Sapindaceae																										
<i>Panda oleosa</i>	Pandaceae																										
<i>Parmentiera aculeata</i>	Bignoniaceae																										
<i>Passiflora caerulea</i>	Passifloraceae																										
<i>Passiflora cf subpeltata</i>	Passifloraceae																										
<i>Passiflora edulis</i>	Passifloraceae																										
<i>Passiflora foetida</i>	Passifloraceae																										
<i>Passiflora laurifolia</i>	Passifloraceae																										
<i>Passiflora</i> sp.	Passifloraceae																										
<i>Passiflora suberosa</i>	Passifloraceae																										
<i>Passiflora quadrangularis</i>	Passifloraceae																										
<i>Pentahopalopilia umbellulata</i>	Opiliaceae																										
<i>Peponium mackenii</i>	Cucurbitaceae																										
<i>Pereskia aculeata</i>	Cactaceae																										
<i>Persea americana</i>	Lauraceae																										
<i>Persea gratissima</i>	Lauraceae																										
<i>Phaseolus</i> sp.	Fabaceae																										
<i>Phaseolus lanatus</i>	Fabaceae																										
<i>Phaseolus vulgaris</i>	Fabaceae																										
<i>Phoenix dactylifera</i>	Arecaceae																										
<i>Phyllanthus acidus</i>	Euphorbiaceae																										
<i>Physalis peruviana</i>	Solanaceae																										
<i>Physalis dioica</i>	Solanaceae																										
<i>Pithecellobium dulce</i>	Fabaceae																										
<i>Podocarpus elongatus</i>	Podocarpaceae																										
<i>Polysphaeria parvifolia</i>	Rubiaceae																										
<i>Pouteria altissima</i>	Sapotaceae																										
<i>Pouteria campechiana</i>	Sapotaceae																										
<i>Pouteria sapota</i>	Sapotaceae																										
<i>Pouteria usambarensis</i>	Sapotaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Pouteria viridis</i>	Sapotaceae																										
<i>Prunus africana</i>	Rosaceae																										
<i>Prunus armeniaca</i>	Rosaceae																										
<i>Prunus cerasus</i>	Rosaceae																										
<i>Prunus cf capuli</i>	Rosaceae																										
<i>Prunus domestica</i>	Rosaceae																										
<i>Prunus persica</i>	Rosaceae																										
<i>Prunus sp. cf capuli</i>	Rosaceae																										
<i>Psidium cattleianum</i>	Myrtaceae																										
<i>Psidium friedrichsthalianum</i>	Myrtaceae																										
<i>Psidium granatum</i>	Myrtaceae																										
<i>Psidium guajava</i>	Myrtaceae																										
<i>Psidium guineense</i>	Myrtaceae																										
<i>Psidium japonicum</i>	Myrtaceae																										
<i>Psidium littorale</i>	Myrtaceae																										
<i>Psidium sp.</i>	Myrtaceae																										
<i>Punica granatum</i>	Punicaceae																										
<i>Pyrus communis</i>	Rosaceae																										
<i>Rawsonia lucida</i>	Flacourtiaceae																										
<i>Rawsonia sp.</i>	Flacourtiaceae																										
<i>Rawsonia usambarensis</i>	Flacourtiaceae																										
<i>Richardella campechiana</i>	Sapotaceae																										
<i>Rollinia mucosa</i>	Annonaceae																										
<i>Rubus flagelaris</i>	Rosaceae																										
<i>Rubus fruticosus</i>	Rosaceae																										
<i>Saba senegalensis</i>	Apocynaceae																										
<i>Salacia elegans</i>	Hippocrateaceae																										
<i>Sandoricum koetjape</i>	Meliaceae																										
<i>Santalum album</i>	Santalaceae																										
<i>Sarcocephalus exculentus</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Sarcocephalus latifolius</i>	Rubiaceae	■	■															■	■								
<i>Scaevola plumieri</i>	Goodeniaceae									■	■																
<i>Scaevola sericea</i>	Goodeniaceae									■	■																
<i>Scaevola taccada</i>	Goodeniaceae									■	■																
<i>Schefflera volkensii</i>	Araliaceae									■	■																
<i>Sclerocarya birrea</i>	Anacardiaceae	■	■															■	■								
<i>Sclerocarya</i> sp.	Anacardiaceae	■	■																								
<i>Sechium edule</i>	Cucurbitaceae															■	■					■	■	■	■	■	■
<i>Sesbania grandiflora</i>	Fabaceae															■	■										
<i>Sideroxylon inerme</i>	Sapotaceae									■	■																
<i>Solanum aethiopicum</i>	Solanaceae																			■	■						
<i>Solanum capsicastrum</i>	Solanaceae									■	■																
<i>Solanum</i> cf. <i>monanthum</i>	Solanaceae									■	■																
<i>Solanum giganteum</i>	Solanaceae					■	■																				
<i>Solanum incanum</i>	Solanaceae															■	■			■	■						
<i>Solanum macrocarpon</i>	Solanaceae									■	■									■	■						
<i>Solanum mauritianum</i>	Solanaceae			■	■	■	■	■	■	■	■																
<i>Solanum melongena</i>	Solanaceae									■	■			■	■	■	■			■	■						
<i>Solanum nigrum</i>	Solanaceae									■	■									■	■						
<i>Solanum pseudocapsicum</i>	Solanaceae									■	■																
<i>Solanum seaforthianum</i>	Solanaceae									■	■																
<i>Solanum torvum</i>	Solanaceae																			■	■						
<i>Solanum</i> sp.	Solanaceae									■	■																
<i>Sorindea</i> sp.	Solanaceae																	■	■								
<i>Sphaerocoryne gracilis</i>	Annonaceae					■	■																				
<i>Spondias cytherea</i>	Anacardiaceae									■	■							■	■								
<i>Spondias mombin</i>	Anacardiaceae									■	■							■	■								
<i>Spondias purpurea</i>	Anacardiaceae									■	■																
<i>Spondias</i> sp.	Anacardiaceae	■	■																								
<i>Strombosia scheffleri</i>	Olacaceae			■	■			■	■																		
<i>Strychnos decussata</i>	Loganiaceae									■	■																

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
<i>Strychnos henningsii</i>	Loganiaceae																										
<i>Strychnos nux-vomica</i>	Loganiaceae																										
<i>Strychnos potatorum</i>	Loganiaceae																										
<i>Strychnos pungens</i>	Loganiaceae																										
<i>Strychnos</i> sp.	Loganiaceae																										
<i>Strychnos spinosa</i>	Loganiaceae																										
<i>Synsepalum brevipes</i>	Sapotaceae																										
<i>Synsepalum dulcificum</i>	Sapotaceae																										
<i>Synsepalum subvertillatum</i>	Sapotaceae																										
<i>Syzygium aqueum</i>	Myrtaceae																										
<i>Syzygium cumini</i>	Myrtaceae																										
<i>Syzygium jambos</i>	Myrtaceae																										
<i>Syzygium malaccense</i>	Myrtaceae																										
<i>Syzygium samarangense</i>	Myrtaceae																										
<i>Tabernaemontana penduliflora</i>	Apocynaceae																										
<i>Terminalia catappa</i>	Combretaceae																										
<i>Terminalia chebula</i>	Combretaceae																										
<i>Theobroma cacao</i>	Sterculiaceae																										
<i>Thevetia peruviana</i>	Araliaceae																										
<i>Tiliacora funifera</i>	Menispermaceae																										
<i>Toddalia asiatica</i>	Rutaceae																										
<i>Tricalysia pallens</i>	Rubiaceae																										
<i>Trichosanthes cucumerina</i>	Cucurbitaceae																										
<i>Trichosanthes dioica</i>	Cucurbitaceae																										
<i>Triphasia</i> sp.	Rutaceae																										
<i>Triphasia trifolia</i>	Rutaceae																										
<i>Uapaca kirkiana</i>	Euphorbiaceae																										
<i>Uvaria acuminata</i>	Annonaceae																										
<i>Uvaria lucida</i>	Annonaceae																										
<i>Vangueria infausta</i>	Rubiaceae																										

Botanical names of host plants	Families	C. cosyra		C. fasciventris		C. rosa		C. anonae		C. capitata		C. quinaria		B. zonata		B. cucurbitae		B. invadens		B. latifrons		D. ciliatus		D. punctatifrons		D. vertebratus	
Vangueria sp.	Rubiaceae																										
Vepris lanceolata	Rutaceae																										
Vepris nobilis	Rutaceae																										
Vepris simplicifolia	Rutaceae																										
Vepris trichocarpa	Rutaceae																										
Vigna radiata	Orchidaceae																										
Vigna unguiculata	Orchidaceae																										
Vitellaria paradoxa	Sapotaceae																										
Vitis vinifera	Vitaceae																										
Warbugia salutaris	Canellaceae																										
Warburgia sp.	Canellaceae																										
Ximenia americana	Olacaceae																										
Ximenia americana var. caffra	Olacaceae																										
Ziziphus abyssinica	Rhamnaceae																										
Ziziphus jujuba	Rhamnaceae																										
Ziziphus mauritiana	Rhamnaceae																										

References:  De Meyer et al.(2002),  White and Elson-Harris (1994),  Vayssieres et al. (2005); Mwatawala et al., (2006); Rwomushana et al. (2008); Goergen et al., unpublished data; Seguni et al., unpublished data