



A Letter from the SGI Chairman

Dear colleagues and funders to *icipe*,

Welcome to our third edition of the quarterly Sponsoring Group of *icipe* (SGI) newsletter, The SGI Quarterly. In this issue we are delighted that *icipe*'s Climate Change flagship programme supported by MoFA, Finland, commences its main operational activities after a successful inception phase. Read more about *icipe*'s new status as a regional centre under the UN Stockholm Convention. We are excited to inform you that the Centre will soon launch its research activities in D. R. Congo following the partnership with Congo's National Agricultural Research Institute. Finally, we share with you memorable moments as *icipe* inaugurated its GMP-compliant enhanced Biosafety level 2/3 Martin Lüscher Emerging Infectious Disease Laboratory. Indeed, the inauguration was a landmark achievement for the Centre and paves way for collaborative research aimed at monitoring, manipulating and investigating emerging infectious diseases as well as other research activities that require high containment. These types of facilities are unique in Africa because of high infrastructure costs and hence *icipe* is highly privileged to be one of the institutions with the facility. This laboratory will improve risk detection, response capacity and research capability for key arbovirus disease agents in Kenya and the region.

Best regards,

Dr Wolfgang Kasten – GIZ, Chairman SGI

Major Funding Event

CHIESA moves into its main operational phase: On 21 January 2011, *icipe* initiated the Inception Phase activities for the flagship programme - CHIESA (Climate Change Impacts on Ecosystem Services and Food Security in Eastern Africa - <http://chiesa.icipe.org/>). A formal meeting of the CHIESA Project Supervisory Board (SVB) was organized in Nairobi on the 24th of August, to discuss the six-months inception phase report and make a decision on its approval, to enable the four-year research and development project commence the actual implementation phase. Ms. Anu Penttinen, the representative of the Ministry for Foreign Affairs (MoFA) of Finland summed up the inception report as well written and of high quality. *icipe* received approval from MoFA on the inception phase report, and hence CHIESA has commenced its main project activities for a four-

year period. Additionally, the other members of the SVB, Dr. Wilson Songa, Agriculture Secretary, Ministry of Agriculture, Republic of Kenya, Eng. Mbogo Futakamba, Deputy Permanent Secretary, Ministry of Agriculture, Food Security & Cooperatives, The United Republic of Tanzania, Mr. Dula Shanko, Deputy Director General, National Meteorological Agency of Ethiopia, *icipe* DG Prof. Christian Borgemeister and Dr. Tino Johansson, *icipe*'s CHIESA coordinator (*ex officio*) were also very pleased with the inception phase report and approved it unanimously. On behalf of the Kenyan Government and the CHIESA consortium Dr. Songa thanked the Government of Finland for its long-term support of Forestry and Agricultural Sectors in Kenya, and expressed his appreciation that the support continues in many ways, especially through the CHIESA project.



Dr. Fabrice Pinard (CIRAD-icipe) studying shaded coffee trees in Setema village located on the CHIESA project research transect in Jimma, Ethiopia.

The research transect in Jimma, Ethiopia showing a typical farm and some highlands.

Recognition

icipe selected as regional centre under the Stockholm Convention on Persistent Organic Pollutants: In 2005, an assessment report by UNEP to identify potential institutions for regional or sub regional centres, identified the International Centre of Insect Physiology and Ecology (*icipe*), Kenya as one of the potential institution. The Convention on Persistent Organic Pollutants (POPs) is a global treaty to protect human health and the environment from highly dangerous, long-lasting chemicals by restricting and ultimately eliminating their production, use, trade, release and storage. In a letter dated 14 September 2011, from the Executive Secretary of the Stockholm Convention, *icipe* was officially notified that the Conference of the Parties to the Stockholm Convention, by its decision SC-5/21, endorsed *icipe* as a Stockholm Convention regional or subregional centre for capacity-building and the transfer of technology for a period of four years.

<http://www.icipe.org/news/488-icipe-stockholm-convention-regional-centre.html>

Important New Partnership

icipe's renewed partnership with D.R. Congo: On 14 September 2011, Prof. Paul Mafuka Mbe-Mpie, the DG of Institut National Pour L'étude Et La Recherche Agronomiques (INERA), the National Agricultural Research Institute, of the Democratic Republic of Congo and *icipe* DG Prof. Christian Borgemeister signed a Memorandum of Understanding (MoU) at *icipe's* HQs in Nairobi, paving way to a strengthened partnership towards an enhanced development agenda between the two institutions. The collaboration will jointly promote scientific research and development, and capacity and institutional building in all agro-ecological zones of D.R. Congo. Accordingly, the two parties agree to conserve and contribute to sustainable use of the agricultural production base, and develop appropriate mitigation and adaptation strategies for the current and potential effects of climate change. The cooperation will include exchange of scientific information through publication of documents, joint conferences, seminars and workshops and other knowledge sharing initiatives.



Prof. Paul Mafuka Mbe-Mpie and Prof. Christian Borgemeister during the signing of the memorandum of understanding to strengthen partnership between INERA and icipe.

Seal stamping on the duly executed copies.

Major Institutional Event

icipe inaugurates its GMP-compliant enhanced Biosafety level 2/3 Martin Lüscher Emerging Infectious Disease Laboratory: On 16 September 2011, *icipe* one of the Centres of Excellence in Africa inaugurated its GMP-compliant enhanced biosafety level 2/3 laboratory for emerging infectious diseases (EID), joining the few existing laboratories on the continent to provide such a resource. This is a landmark achievement for the Centre and the specialized laboratory will contribute to EID preparedness and response in the region. *icipe* plans to use this laboratory to conduct research and surveillance on emerging arboviral diseases including Rift Valley Fever (RVF), West Nile, Dengue and

Chikungunya among others, all arboviral disease of epidemic potential in East Africa. Ongoing *icipe* surveillance for arbovirus infection, distribution and diversity under a *Google.org* supported project (<http://avid.icipe.org/>) is a platform that could also lead to the detection of new strains of known and also unknown arboviruses. The ultimate goal of these research activities is to improve risk detection, early warning and the response capacity of the national programs in Kenya and the region to these arbovirus disease outbreaks. Projects planned for implementation in the new laboratory will incorporate training of MSc and PhD students and public health specialists from Ministries of Health of East African countries and beyond to improve/build on the existing network of surveillance, diagnostic and research capacity in arbovirus diseases in Africa.

<http://www.icipe.org/news/489-launch-of-east-africas-first-laboratory-of-emerging-infectious-diseases.html>



H.E. Jacques Pitteloud, Swiss Ambassador to Kenya, officially cuts the ribbon to inaugurate the Martin Lüscher Emerging Infectious Diseases Laboratory.



Swiss Ambassador to Kenya just after unveiling the plaque.

Important Research Finding

Tamiru, A., Bruce, T. J. A., Woodcock, C. M., Caulfield, J. C., Midega, C. A. O., Ogot, C. K. P. O., Mayon, P., Birkett, M. A., Pickett, J. A. and Khan, Z. R. (2011), Maize landraces recruit egg and larval parasitoids in response to egg deposition by a herbivore. *Ecology Letters*. doi: 10.1111/j.1461-0248.2011.01674.x

<http://onlinelibrary.wiley.com/doi/10.1111/j.1461-0248.2011.01674.x/full>

Natural enemies respond to herbivore-induced plant volatiles (HIPVs), but an often overlooked aspect is that there may be genotypic variation in these “indirect” plant defence traits within plant species. We found that egg deposition by stemborer moths on maize landrace varieties caused emission of HIPVs that attract parasitic wasps. Notably, however, the oviposition-induced release of parasitoid attractants was completely absent in commercial hybrid maize varieties. In the landraces, not only were egg

parasitoids attracted but also larval parasitoids. This implies a sophisticated defence strategy whereby parasitoids are recruited in anticipation of egg hatching. The effect was systemic and caused by an elicitor, which could be extracted from egg materials associated with attachment to leaves. Our findings suggest that indirect plant defence traits may have become lost during crop breeding and could be valuable in new resistance breeding for sustainable agriculture.

Private Sector Commercialisation of *icipe*'s Biopesticide

***icipe* product registration:** The partnership of *icipe* and Real IPM (<http://www.realipm.com/>), a Kenya based bio-pesticide company, allowing Real IPM to market a strain of the entomopathogenic fungus *Metarhizium anisopliae* (*icipe* 69) for pest control in Africa, has eventually led to the provisional registration of the product in Ghana. In addition, the popularity of the product is growing and South Africa and Ethiopia are considering registering the product in their countries as well.

