

Plants have evolved direct and indirect defence strategies against attacking organisms. Directly, they produce toxins, digestion inhibitors and herbivore-induced plant volatiles (HIPVs) repellent to phytophagous insects; indirectly they use HIPVs to attract natural enemies antagonistic to the herbivore. Previous studies on maize, *Zea mays*, have shown that feeding by herbivorous insects induce the crop to emit volatiles attractive to natural enemies. An often overlooked aspect is that there may be genotypic variation in these indirect plant defence traits within plant species. Moreover, little has been known about the reaction of maize plants to egg deposition. Results from the current study showed emission of HIPV semiochemicals by certain maize landraces in response to egg deposition by spotted stem borer *Chilo partellus* Swinhoe (Lepidoptera: Crambidae), a major insect pest of maize in sub-Saharan Africa. In behavioural study, volatiles from maize exposed to egg deposition were preferred by key egg parasitoid *Trichogramma bournieri* Pintureau (Hymenoptera: Trichogrammatidae) and the larval parasitoid *Cotesia sesamiae* Cameron (Hymenoptera: Braconidae) to volatiles from unexposed plants. Moreover, volatiles collected systemically from egg free leaves of plants exposed to *C. partellus* oviposition were also attractive, indicating production of the defence signals is not limited to site of egg deposition but emitted systemically throughout the plant. Preference of larval parasitoid *C. sesamiae* to odours of egg-induced plants underscores the intriguing degree of sophistication in the landrace's indirect defence enabling them to alert larval parasitoid bodyguards against future herbivory. Similarly, volatiles from maize landraces treated with ethanolic egg extract were attractive to parasitoids which provided evidence that material coating *C. partellus* eggs, and causing them to adhere to plant leaves, contains an elicitor that induces the emission of HIPVs. GC-coupled electrophysiological recording with attractive samples revealed that *C. sesamiae* was responsive to ten volatile organic compounds, namely, (E)-ocimene, (R)-linalool, (E)-4,8-dimethyl-1,3,7-nonatriene, methyl salicylate, decanal, methyl eugenol, (E)-caryophyllene, α -bergamotene, (E)-farnesene and (E,E)-4,8,12-trimethyl-1,3,7,11-tridecatetraene. Volatile analysis by GC and GC-MS revealed marked increases in emission of these compounds in maize landraces exposed to stem borer oviposition compared to unexposed. In contrast, volatiles collected from standard hybrid commercial varieties exposed to eggs were not attractive to both parasitoids, implying the ability to produce the defence volatile signals might have been lost during breeding processes. Preliminary molecular investigation revealed high transcript levels of gene encoding for an important sesquiterpene synthase implicated in indirect maize landrace defence against stem borer after herbivory. By providing more insight into the existing knowledge of stem borer-maize-natural enemy tritrophic interaction, results from the current study pave way for designing novel and ecologically sound pest management strategies against damaging crop pests like *C. partellus*.