

Foreword

Fruit flies are among the most destructive pests of agricultural and horticultural crops in the world, with significant consequences for international trade. The sterile insect technique (SIT) is a very effective biological control method, which is often integrated as a vital component of area-wide integrated pest management approaches to suppress, eradicate or prevent the establishment of these important pests in an environmentally friendly way. A critical component of the SIT is the mass-rearing of the target insect in large numbers. The Food and Agriculture Organization of the United Nations (FAO)/International Atomic Energy Agency (IAEA) implemented a 5-year co-ordinated research project (CRP) with the participation of scientists from 16 countries, to develop and improve the rearing of several *Bactrocera* and *Anastrepha* fruit fly target species. In 2012, we plan to publish a supplement on the outcomes of this CRP that is written, reviewed, compiled and edited by fruit fly experts.

Infestations by fruit flies are a major problem impeding the production of high-quality fruits. Knowing the species composition of the flies in any given area is of crucial importance for the development and implementation of appropriate control measures, as shown in this issue in a study in a citrus museum. Insect pathogens are increasingly becoming vital tools in the fight against Asian citrus psyllid, as the example of the Mexican study in the current edition of JTI exemplifies.

Insects, including honeybees, are undeniably the main pollinating agents for numerous crop plants

around the world. Unfortunately, too little is known about the relationships between pollinators and their preferred flowering plants in the tropics, and the subsequent effects on plant and honey yields. A study evaluating the impact of honeybees on fruit and seed setting of an important ornamental plant in Cameroon revealed the significant impact of pollination on subsequent yields. The increased productivity of the plants also resulted in considerably improved honey yields, all to the benefit of the growers and beekeepers.

Other research in the present issue of JTI highlights the effect of hyperparasitoids on the behaviour of primary parasitoids and the potential implications for biological control; the impact of the rearing history on an important coccinellid species, predators of aphids and other soft-bodied insects; integrated pest management of the coffee berry borer, worldwide the most important biotic constraint for coffee production; the life history of a newly reported pest of honeybee colonies in East Africa; and, finally, a study on phlebotomine sandflies in Sri Lanka, vectors of the dreaded disease leishmaniasis.

As usual, we encourage scientists around the world, to send their contributions to the *International Journal of Tropical Insect Science* as we continue striving to become *the* reference journal for tropical entomology.

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