

Foreword

The latest paradigm in sustainable development, to which the United Nations and other development partners are looking as the milestones for a brighter future, are the Millennium Development Goals (MDGs). The eight goals, approved by the UN member countries, are complemented by a series of targets to be achieved by the year 2015. Ranging from halving the number of the hungry to reducing poverty and increasing international partnerships, they cover the main areas of hunger/nutrition, poverty, combating HIV/AIDS and malaria, improving the environment, improving maternal health and reducing child mortality, global development partnerships, gender equality and women's empowerment, and universal primary education.

The set targets are still a matter of discussion and disagreement on how and when they can be achieved. We, editors at the *International Journal of Tropical Insect Science* firmly believe that insect (arthropod) sciences are a key to achieving the targets set in all the eight MDGs. In the area of food security and poverty reduction, it is increasingly obvious that we need new ways to manage plant pests, and plant and animal disease vectors. The losses that are attributed to these pests and vectors are equivalent to well over the amounts needed to feed not only today's global population, but also the population of some 8–9 billion people expected by the year 2050. It is only by protecting our crops and livestock, as well as our forests and fibre crops, that we will make sure that we can sustainably cover the needs for food, feed, fibre, shelter and energy for the expected population growth until it peaks by 2050.

However, there is more to the insect sciences and their contribution to the MDGs. From the human health perspective (including child mortality and maternal health), to managing our insects in an environmentally and economically sound manner (thus addressing several MDGs), the applied insect sciences will help to reduce vector-borne diseases such as malaria, dengue, sleeping sickness, leishmaniasis, and so forth, and will thus significantly reduce the burden on

the poor. Not only will these people be in better health, but also they will be more productive in school and employment. Having a healthy workforce may well be the key to a booming economy, and could be the difference between a moribund and sluggish economy and a successful, productive one.

Insects have also a further, largely untapped potential for income generation. Two examples are bees and silkworms. These two groups of insects already have contributed significantly in some societies to wealth and health. There are many more opportunities for commercial exploitation of insects that remain untapped.

A new research and capacity building agenda with the practical objective of supporting the achievement of the MDGs is very much needed. There are major gaps in all disciplines of entomology that need to be bridged. I would therefore like to stress that there should not be an over-concentration of entomological research in the molecular field, as just as much work is needed in the fields of insect ecology, taxonomy and physiology. At the least, such work is needed to make better use of the discoveries in the molecular sciences. The implementation side of the entomological sciences should also not be minimized. Guided and supported by social sciences, integrated pest and vector management, biological control and plant health in the wider sense will benefit from a special effort to bring the basic entomological sciences to bear on the MDGs.

This journal, now in its second year of co-publication by CABI Publishing, the International Centre of Insect Physiology and Ecology (ICIPE) and the African Association of Insect Scientists (AAIS), covers all areas of basic, strategic and applied insects science and related research relevant to the development issues of the tropics.

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