For the love of insects

Insects of Cultivated Plants and Natural Pastures in Southern Africa really is a superb book. It radiates a love of insects and dedication to detail. The whole presentation is highly professional and user-friendly, and the editors are to be congratulated on their setting of such high standards.

As Cliff Moran points out in his Foreword, every time we purchase a plant product we are in part paying a bounty to offset the control of pests on those products. Financially, this situation is a real concern, with 15% of total plant food production lost to pests worldwide before the plant product is harvested, and another 10% lost during transport and storage after harvest. The situation is magnified when crops are exported, as is very much the case for many southern African plant products. Importers have strict tolerance limits with regard to the potential entry of pests into their countries. In the case of some of our indigenous pests, there is zero tolerance, which places high demands on producers and exporters to be rid of pests.

This huge volume of 786 pages is authored by 38 integrated pest management specialists who focused on their crops or domains of interest. The book comprehensively covers all the significant pest insects across southern Africa – which is a massive achievement. A total of 416 pest species are discussed, with a focus on their origin and distribution, identification, host plants, damage, and life history, and with brief notes on natural enemies and on management. Another 277 species are listed as minor pests. This book is made even more appealing by the numerous excellent photographs of the main subject insects and the damage that they cause.

The book is arranged into 12 sections: (1) vegetables, (2) cereals and sugarcane, (3) oil and protein-rich seed crops, (4) pastures and fodder crops, (5) turf grasses, (6) miscellaneous field crops, (7) deciduous fruit and nut trees and olive, (8) grapevine and berries, (9) citrus, (10) subtropical fruit and nut trees and coffee and tea, (11) plantation trees and, finally, (12) ornamental plants. Some of these sections are divided into individual crops and other subsections. Each section or subsection has a useful introductory/summary table listing the significant pests, with their scientific names, plant host (including the plant parts affected), and extent of descriptive treatment in the book. A glossary is also provided.

It behoves a reviewer to also criticise, so as to advance the field. There are some idiosyncrasies with this volume. Firstly, it should really have been called Insect Pests of… rather than Insects of… as it focuses on pest insects, and the treatment of natural enemies of the pests is very superficial. It is strange that mites are not included as they can often be as significant as insects in causing crop losses, and are usually included side by side with insects in most integrated pest management programmes. Perhaps the volume was large enough anyway, but at least a few major species could have been included. One would hope that a companion volume on mite pests – which meets the standards set by this book – will one day become available.

Arguably, the weakest part of the book is the referencing, with a very strong bias in some sections to the authors' own works and almost no recognition of several important and fundamental works of others in the same field. This is especially so in the case of citrus. An electronic link to an extensive literature base would have been appropriate in this age of such linkages, and perhaps can still be included, not just of the pests but also of the natural enemies.

These criticisms aside, this book is a masterful piece of work, and Gerhard Prinsloo and Vivienne Uys have succeeded without doubt in producing a fine reference work that will remain the standard for many years to come.

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