
BOOK REVIEWS

Pest Management: Entomology Series 1 by B. Vasantharaj David. (Published by Federick Institute of Plant Protection and Toxicology, Madras 601 301), 1986, pp. 51. Price: Not given.

This concise publication is the first of what appears to be a new series on pest management, produced by a private research organization. It contains nine papers based on dissertations of M. Phil. students.

The preface traces the history, growth and activities of the Federick Institute of Plant Protection and Toxicology (FIPPAT) since its establishment in early 1979. The nine papers are presented under seven broad group headings: Pesticide toxicity to soil microarthropods; Chitin inhibitor-promising new compound; Insect pests of weeds; Pesticide toxicity to honey bee; Host specificity; Insecticide persistence and bioefficacy; and Pesticide toxicity to natural enemies. The first of these contributions discusses the effect of four commonly used granular pesticides on soil microarthropods in rice fields. The next two articles describe the effect of diflubenzuron on the jasmine bud worm, a common horticultural pest in southern India. Then follow two papers dealing with insects associated with euphorbiaceous weeds, and the life-history of a whitefly attacking two wild *Phyllanthus* spp. The toxicity of ten pesticides to the honeybee *Apis indica* is compared in the succeeding paper, and two compounds are recommended for use in integrated pest control. The effect of various host plants on the biology of the citrus psylla is discussed in another paper. Residual toxicity of six insecticides on cotton leaves is evaluated in the next paper while the last one describes the biology of the parasite *Chelonus blackburni* and evaluates the relative toxicity of seven insecticides to two parasites of cotton boll worms.

The topics covered by the dissertations are wide-ranging and very relevant to the aims of good pest management. FIPPAT has done well in publishing the results in one consolidated journal.

Unfortunately, the many photographs reproduced on ordinary paper have suffered much in quality. An index of species dealt with in the papers would have added to the value of the publication.

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Helpful Insects, Spiders and Pathogens by B. M. Shepard, A. T. Barrion and J. A. Litsinger, (Published by IRRI, Los Banos, Laguna, The Philippines), pp. 127.

Rich communities of predators, parasites and spiders have been indicated as attacking insect pests of rice, with 26 species of predators (8 species of spiders, 5 species of beetles and 5 species of hemipteran bugs), 39 species of parasites (mostly hymenopterans and dipterans) and pathogens including baculoviruses, bacteria and fungi. Predators occur in every part of the rice environment feeding on leaf hopper and larvae of stem borers and spiders feeding on eggs, of which about 80–90% are consumed by predators, whose preservation appears essential to enable the minimal use of pesticides. Parasites being more host specific, mass rearing for release is very useful, the rich community of parasites tending to keep pest populations at economically significant levels. It is interesting that 18 species of parasites have been collected from leaf folders of the rice plant.

Fungi are equally important, infecting and killing 90–92% populations of the Brown Plant Hopper. Viruses and fungi also control caterpillar pests and viruses have been recorded for every species of caterpillar. More than 150 coloured illustrations as well as black and white photographs of predators and parasites appear to be very useful in view of their affording quick identification to the farmer and equally to students of agricultural entomology. It is hoped that this small but unique volume will serve to inspire entomologists to prepare similar hand books for other major economically important crops.

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