Literature

Salmon, J. T. 1991: The Stick Insects of New Zealand. 124 pp., 67 black-and-white and 94 colour illustrations. Size 19.5×25.0 cm. — Reed Books, Auckland, New Zealand. ISBN 07900 0211 6. Price NZD 42.

Stick-insects no longer inhabit our part of the world. Remains in the Baltic amber show that they were once present in our oak forests. Our geographical antipod New Zealand has a small fauna consisting of 16 species. They were once numerous but were heavily diminished due to the use of DDT in the 1950s. Fortunately the populations are steadily recovering from that disaster. Due to the damage caused to the natural populations, little is known about the ecology of these species. It is therefore pleasing to see the publication of a book covering the complete New Zealand fauna.

A general introduction describes the order Phasmida and deals with the New Zealand one. This is followed by a historical review of the New Zealand species from its first discovery in 1846 to the more recent discoveries of New Zealand species in the British Isles. The next chapter describes the morphology of the adults in great detail, with emphasis being given to the terminal abdominal segments of both sexes since these are of importance in distinguishing the species. The habits of the species are then described, including occurrence, feeding habits, defence and regeneration. Thereafter various aspects of the life-histories are described, viz. mating, parthenogenesis, sexual reproduction, hatching, moulting, as well as rearing techniques for studies in captivity. A chapter is devoted to the taxonomic importance of the egg morphology.

The remaining part of the book is of a more taxonomical nature. First keys are provided for the genera and species levels, based on morphology of the adults and eggs. The species descriptions include data like English names, scientific names and synonyms, detailed descriptions of females, eggs, males, geographical distribution, habitat, ecology and other important information of relevance to the different species. All adults are illustrated life-size in colour, as well as the nymphs of some species. In cases where different colour morphs or subspecies occur, they are also illustrated. The eggs are colour-illustrated in great magnification. Black-and-white illustrations are provided for the terminal abdominal segments. A selective bibliography of some fifty papers is included and an index of scientific and English names is also provided.

This is not just another taxonomic book, it is also a fine work of art — the illustrations are superb. It provides a firm taxonomic base for ecological studies of the New Zealand species. Moreover, all works completely covering any small or large geographical areas are of great importance. The moderate price is another plus. Finally, the author, John T. Salmon, is to be congratulated on a fine and valuable little book.

Ulf Carlberg