

most widely recognized insects in the world. They occur from northern India and southern China to northern Australia. As a result of the interest in them, a considerable number of papers and descriptions have been published, usually without much prior knowledge of what was already in the literature. The result has been chaos. Now it is possible to go to one publication and learn to distinguish the 14 included species, to obtain the correct names for them, and to find out the status of all the other names that have been proposed. These total 50 (the emendations of which balloon the total to over 100!) for the species now included in *Attacus*. Plus anything and everything that pertains to these moths.

All of this is accomplished in a handsome, soft cover book, printed on glossy paper with wide margins; typographical errors are almost non-existent. The book is well organized and easy to use. In addition to the introduction, literature review, materials and methods, there are sections on morphology (egg, larva, pupa, and adult), systematics, biology and ecology, relationships of genera within the Attacini, zoogeography, phylogeny and speciation, and conclusions. There are over 10 pages of literature citations, an extremely valuable section of the book. The two appendices list recorded foodplants of *Attacus* and zoogeographical names, providing valuable help for an area in which so many name changes have taken place.

The illustrations are grouped in the back of the book. The black and white figures include distribution maps, morphology (larva, pupa, adult, venation), male and female genitalia, and cladograms. The four color plates show 3 caterpillars and 33 adults; the latter are reduced and of the right side only, due to the large size of these moths. The colors are quite good. All 14 species are shown, with type material of half of them being illustrated.

This is one of the best revisionary works on Lepidoptera to have been published; it sets a model for others to follow. I strongly recommend this revision to anyone who has any interest in these very large and showy moths, or in seeing a first-rate revisionary study. For me, it was well worth the cost of the book to have all the nomenclature cleared up, with just the species names themselves being utilized.

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A REVISION OF THE INDO-AUSTRALIAN GENUS *ATTACUS*, by Richard S. Peigler. 1989. Lepidoptera Research Foundation, 9620 Heather Road, Beverly Hills, California 90210. xi + 167 pp., 24 text figs., 4 color plates. Soft cover, 20 × 28 cm, ISBN-9611464-2-7, \$30.00.

Peigler revises this genus of tropical saturniine saturniid moths as thoroughly as is humanly possible with museum specimens and old literature. He then comes to us on bended knee and apologizes for doing this for a land he has never set foot in! As I read through this magnificent effort, I put on my "living in a developing tropical country hat" and asked "What would I have wanted Peigler to do with *Attacus*?" Would I have wanted him to spend years raising money to tourist around southeast Asia collecting an *Attacus* here and there, and soaking up the humidity and color of *Attacus* habitats? No.

Without doubt I would have wanted him to do exactly what he did. Peigler has taken one of the most conspicuous and tractable insects of southeast Asia, and cleaned the last two centuries of garbage and debris off the framework. As I turn page after page of Peigler's detailed and painstaking analysis of bad taxonomy, bad literature, printer's errors, bad biology, rare books, fractured journals, and bad specimens, and all the last century of taxonomic exploration by mediocre biologists and taxonomists in three European languages, I thank God for the Richard Peiglers of the world.

Can you imagine what hell it would have been for a Javanese biologist to have to spend four years of his life trying to sort out this mess before going to work on these fascinating

moths? What Peigler has done is swept all that muddled antiquariat into a snug and concise library file, sunk 38 names, and given us 14 taxonomically and nomenclatorially clean names. He has fulfilled the taxonomist's real mission. He has set up *Attacus* for a broad scale attack, by a southeast Asian resident, on its biology, ecology, natural history, ethology, morphology, cladistics, genetics, and chemistry. A clean taxonomy and nomenclature is the best start that any biologist can ask for in the tropics. If only we had a Peigler for every tropical genus with more than five species. And what a miracle it would be if all taxonomists had Peigler's ability and desire to elicit collaboration and help as he has done from the remainder of the community of workers on saturniid moths.

There may even be some more species of *Attacus* in southeast Asia, and now the resident biologist—anywhere between India and New Guinea—has a serious chance of finding them, knowing them, and using them.

And can you believe it? Peigler even had the common sense to put summaries in Bahasa Indonesia and Japanese at the beginning of his work. These are followed by a historical review of the taxa above *Attacus*, and a very detailed account of each of the 14 species. Not surprisingly, the two new species are known from only one and three specimens and are from small islands. Not only has Peigler cleaned up and summarized for the resident tropical biologist the old taxonomic literature on *Attacus* in developed world publications and museums, but he has done the same with the biological information on parasites, food plants, flight periods, and habitats occupied by *Attacus*.

Peigler finishes with a detailed analysis of the phylogenetic relationships between *Attacus* and the other genera of the tribe Attacini. He presents the logic and cladistic technology that lead to the postulation of a multi-branched phylogeny with *Attacus* and the eight other attacine genera, with the old world genera as one group and the new world genera as another. However, I cannot avoid noting that either *Rothschildia* and *Attacus* are one of the most incredible cases of convergence in color pattern available (which I doubt), or *Rothschildia* and *Attacus* represent the color pattern of the original saturniid species that gave us the Attacini. This in turn implies that the life form of these moths dates back at least to a time approximating the beginnings of continental separation. And even more tantalizing is his observation that the one *Enicospilus* ichneumonid wasp reared from *Attacus atlas* in West Malaysia is of the same *Enicospilus* species group that attacks *Rothschildia* and other large saturniine saturniids in the New World.

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