

BOOK REVIEW

Barrion, A. T. and J. A. Litsinger. 1995. *Riceland Spiders of South and Southeast Asia*. CAB International, Wallingford, England, xix + 700 pp. US\$225.00.

This massive volume, containing over 700 large, double-column pages, represents the culmination of almost 20 years' work by the authors, their illustrator Danilo Amalin, and other members of their team at the International Rice Research Institute in Manila. It is primarily a contribution to the original taxonomic literature, containing descriptions (and well over a thousand illustrations) of 342 species; fully three-quarters of the species (and no fewer than eight genera) are described as new. The wide geographic coverage indicated in the title refers to the inclusion of a handful of taxa and records from such areas as Bangladesh, India, China, Thailand, Cambodia, Myanmar, Vietnam, and Indonesia, but 99% of the book is devoted just to those parts of the Philippine spider fauna that happen to have been collected in ricelands, rather than native habitats. It is certainly the first major work on this important part of the world.

The non-systematic sections at the front of the volume are relatively brief: an introduction that provides a short history of Philippine arachnology, a survey of external anatomy that, together with the glossary, provides enough details to allow beginners to use the keys to families and species, and a page on life histories. There is a listing of the 48 Philippine sites, on eight islands, that were sampled; among other techniques, pitfall, malaise, and suction traps were used in the fields. A classification is provided for just 34 families, including eight not actually discussed in the volume (Dipluridae, Tetrablemmidae, Ochyroceratidae, Palpimanidae, Ctenidae, Amaurobiidae, Anyphaenidae, and Prodidomidae), but those 34 families hardly exhaust even the known Philippine fauna (missing are at least the Filistatidae, Segestriidae, Mysmenidae, and Psechridae).

At the end of the volume, there are brief

discussions of a few other arachnids (mites, opilionids, and pseudoscorpions) and of spider diversity in Philippine ricelands. About 30 pages are devoted to tiny distribution maps, which fall largely into two classes. A few species, such as several of the tetragnathids, are so widely distributed, and so commonly collected in ricelands, that their maps show dots virtually everywhere. But most of the species treated in the book are represented by very few specimens; I doubt if the mean number of specimens per species actually reaches as high as two, so many maps show just a single dot, and one large map showing the 48 collecting sites would have been more useful. The glossary is followed by a bibliography, an index to species, and 16 color plates of photographs of our favorite creatures. The bibliography is scanty, and overlooks some of the most relevant literature; the authors have even omitted the 1993 "Illustrated Monograph of the Rice Field Spiders of Bangladesh" by C. Okuma, N. Q. Kamal, Y. Hirashima, M. Z. Alam, and K. Ogata (Institute of Postgraduate Studies in Agriculture [Salna, Gazipur, Bangladesh]-Japan International Cooperation Agency Project, Publication 1).

But it is the systematic section that counts here, and one can readily sympathize with the authors' predicament. The magnitude of the task implied by their presumed directive from the authorities at the International Rice Research Institute—to cover all spider species collected in Philippine ricelands—is daunting, perhaps even mind-boggling. I doubt that any arachnologist today would undertake to treat the entire spider fauna of any part of a tropical region in the absence of such an administrative directive. The results must, of necessity, be less than ideal, for no single arachnologist, nor even a pair of workers, can be thoroughly conversant with the systematics of all spider groups, from tarantulas through jumping spiders.

Nevertheless, tackling a task like this requires that the authors at least be aware of the relevant published literature on each of the

families they cover. In several instances, that is clearly not the case with this volume. Perhaps the weakest areas in the book deal with the hunting spiders. The section on gnaphosids, for example, includes several unfortunate lapses. The authors treat the species *Zelotes cavaleriei* Schenkel 1963, originally described on the basis of a female from China; they re-describe the female and describe a male "for the first time." But that Schenkel name was shown, 12 years ago, to be just one of many synonyms of the widespread, synanthropic species *Trachyzelotes jaxartensis* (Kroneberg 1875). Barrion and Litsinger present (without comment) two completely different figures of the epigynum of *Zelotes cavaleriei*, and those two figures represent specimens of two different genera! The epigynum on the right in their fig. 105b is indeed that of *T. jaxartensis*, but the one on the left belongs not to any member of *Trachyzelotes* Lohmander 1944 or *Zelotes* Gistel 1848, but rather to a member of *Setaphis* Simon 1893 (the male they describe is also a *Setaphis*, belonging to a species that is widespread in Africa as well as Asia). Similar lapses in familiarity with the recent literature are their use of such outdated names as *Clubionoides* Edwards 1948 (a junior synonym of *Elaver* O. P.-Cambridge 1898), *Langbiana* Hogg 1922 (a junior synonym of *Mallinella* Strand 1906), and *Hersilia clathrata* Thorell 1895 (a junior synonym of *H. savignyi* Lucas 1836).

Even when they are aware of the literature, the authors sometimes make pointless errors. For example, they assign one of their new gnaphosid species to *Geodrassus* Chamberlin 1922, a North American genus that they acknowledge was synonymized with *Drassodes* Westring 1851 over 20 years ago. They present no evidence whatever that their Philippine spider is related in any way to the type species of *Geodrassus*, and indeed, it is clear that their species has no such relationships; the illustrations of the eye pattern and male palp show a member of the Echeminae, not a member of the Drassodinae at all!

Similar errors occur throughout what the authors anachronistically consider the "Clubionidae"; they assign species to such well-known northern hemisphere genera as *Agroeca* Westring 1862, *Phrurolithus* C. L. Koch 1839, and *Scotinella* Banks 1911, but none of those new taxa are correctly placed. The spe-

cies described as a member of the liocranid genus *Phrurolithus*, for example, is clearly a member of the corinnid genus *Oedignatha* Thorell 1881 instead, and the name will probably prove to be just a synonym of the widespread type species *Oedignatha scrobiculata* Thorell 1881, already known from India, Sri Lanka, Malaysia, the Seychelles, and Indonesia.

Perhaps even more distressing is the general lack of adequate diagnoses, both for the new species and the new genera. In most cases, new taxa are presented without any reference to previously described ones. For example, early in the volume, a male salticid is described as the new species *Phaeacius mainitensis*. As is typical for the volume, there is a lengthy verbal description, excellent illustrations of somatic characters, and at least adequate figures of the genitalia (although in general the male palpal figures are not up to the high standard of the other illustrations). But there is no diagnostic information to indicate how *P. mainitensis* can be differentiated from any of the other three species already known from the Philippines (*P. alabangensis* Wijesinghe 1991, *P. canalis* Wanless 1981, and *P. leytensis* Wijesinghe 1991), much less from other members of the genus that occur elsewhere. Indeed, from the volume, one cannot determine whether the authors are even aware of all three of those other Philippine species!

Under the changes that are proposed for the next edition of the *International Code of Zoological Nomenclature*, descriptions such as these, which lack informative comparisons to other taxa, will no longer meet even the minimal requirements for legal acceptance as valid taxa. After perusing this volume, I conclude that those changes cannot be enacted too soon. Consider, for example, the new genus *Alaeho*, based on a new species, *A. linoi*, described here from a single male from Luzon. The description of the genus and species fills a large page, but not a word is devoted to determining which "clubionid" subfamily contains the genus, what other genera the animal might be related to, or how one might distinguish *Alaeho* from any other genus. The only thing clear from the authors' treatment is that the animal is probably misplaced in the Clubionidae. A special stay in Purgatory will be required to atone for those of the new species that are described without a single genitalic illustra-

tion (such as *Misumenoides pabilogus* and *Theridion kambalum*).

The lack of diagnostic information sometimes extends even to the authors' own taxa. For example, the authors describe as new a female from Mindanao (*Cheiracanthium tingilium*), but provide no indication of why this specimen is not the female of *Cheiracanthium daquilium*, described 12 pages earlier on the basis of a single male taken in the same province of the same island. No fewer than 12 new species of *Clubiona* Latreille 1804 are described from the same village on Luzon! Are we really to believe that the two single females that are designated as holotypes of new species are not conspecific with any of the nine different males that are also described as new species (for which no females are known)? Surely the relevant null hypothesis here is that all the specimens are conspecific, and additional evidence is required to support each and every increase in the number of species hypothesized.

A similar lack of information concerns synonymies. *Clubiona atwali* Singh 1970, for example, is listed as a junior synonym of *C. drassodes* O. P.-Cambridge 1874, without any indication that this is a new synonymy (it is, as far as I know), without any indication of whether the authors have seen the types of either name (unlikely, I suspect), and without any explanation of the grounds for the new synonymy (whatever they might have been). In another case, an unmarked synonymy even inadvertently sinks a generic name, when *Lycosa arorai* Dyal 1935 (the type species of *Chorilycosa* Roewer 1960) is placed as a junior synonym of *Pardosa sumatrana* (Thorell 1890).

At higher levels, the authors are conservative in, for example, retaining Metidae as a family distinct from Tetragnathidae. As Mark Harvey has discovered, however, Metidae is not available as a family-group name in spiders, for it is preoccupied within the copepods (where it is based on the genus *Metis* Philippi 1843). The proposed changes in the Interna-

tional Code will allow arachnologists to overcome this problem automatically, by simply using the full name, rather than the stem, of the type genus and spelling the spider group as Metaidae or Metainae.

Although the volume will probably produce a fairly large number of new synonyms, it is unlikely to contain any further homonyms, for the authors have often combined Tagalog words to produce names that are, at the very least, unique. I used to think that *Prodidomus papavanasanemensis* Cooke 1972 took the prize for worst-formed spider name, but Cooke's name is downright euphonious compared to the likes of *Clubiona paranghinlalakirta* (not to be confused, of course, with the new *Clubiona parangunikarta*). Some of the etymologies are humorous; *Clubiona krisisensis* refers not to a place name but to a gasoline shortage, whereas *Enoplognatha yelpantrapensis* refers to just what it sounds like. Some of the jokes seem private (*Clubiona topakea* is "Named after systematist with unsympathetic attitudes").

Those with such unsympathetic attitudes might well wonder what review process, if any, this manuscript passed through before it went to press, and whether any competent systematist (sympathetic or otherwise) would have judged it ready for publication in this form. But the task undertaken by the authors was impossible by definition, and their contribution must be evaluated primarily by comparison with other works produced, for similar reasons, in similar parts of the world. Compared, for example, to several such works produced in India, this volume represents a substantial advance in our knowledge of south and southeast Asian cropland spiders. The enormous cost of the volume will probably limit its distribution to a small handful of libraries, and it is likely to be least available to those workers who could most make use of it.

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