

**REVIEW: Griswold, C. E. 1987. A Revision of the Jumping Spider Genus *Habronattus* F. O. P.-Cambridge (Araneae: Salticidae), with Phenetic and Cladistic Analyses. Univ. California Publ. Entomol. 107, Univ. Calif. Press, ix + 344 pp. G. B. Edwards.**

There have been two previous reviews of this work (Cutler 1987, Parker 1987). The first review lauds it as the first major revision of a primarily North American salticid genus in three quarters of a century. While noting what he considers "minor shortcomings," the reviewer also praises the phylogenetic analysis and cites this work as a major reference to taxonomic methodology. The second review is a straightforward summary of the contents; in the reviewer's words, "an announcement" of the work, without judgment of its merit.

Unquestionably, this work adds much needed information about the systematics of the genus *Habronattus*. The description of 29 new species out of 94 species recognized represents a considerable amount of work, as does the analysis of 172 characters for 84 species for which males are known using two separate methodologies. The assessment of so many characters leads to highly detailed species descriptions, desirable when so many similar species exist. I agree that the methodology used for defining characters could be used as a model for use with other genera, although in a few instances here, alternate character states are listed as separate characters. The key to males appears to be excellent (but couplet 1 should direct you to couplet 2, not 12).

However, I cannot consider a failure to deal with females a minor shortcoming. In my view, the primary purpose of a revision is to describe, diagnose, and properly illustrate the included species in such a way that they can be readily identified: it should be a synthesis of new and old information which stands by itself. That situation does not exist in this revision. There is no key to females. Given that the females within some species groups are difficult to separate, there should at least be a key to species groups. The reader is referred to other works to identify some females. Of those species illustrated, the internal epigynal structure is illustrated for only 3 species. Not all of the males are adequately illustrated either. The illustrations range in quality from average to very good, depending upon what is being illustrated.

The secondary purpose of a revision would be to place the species in a phylogenetic scheme showing their supposed relationships based on available evidence. Clearly an immense amount of time went into analyses of characters. However, most of the analyses utilized far fewer than the 172 character states quantified, for various reasons. Only the obviously well-defined groups consistently clustered together regardless of the analysis method, and phylogenetic resolution remained poor for many taxa. Phylogenetic analyses were performed only on males, whereas resolution of species relationships might have been improved by adding the information gained from analyses of females. Predictions could have been made concerning the missing sex of the 26 species (16 male only, 10 female only) known only from one sex. A key to species groups of females might also have been practical if their

characters had been analyzed in the same manner as the males. From the standpoint of analysis, I believe an opportunity was missed here. But perhaps the excessive effort expended on analysis served best to show that future workers ought to spend more of their time in making sure the species are properly identifiable.

I will say in the author's defense that he is aware of the deficiencies of this work. Given certain time constraints, he chose to make available what he had rather than hold 29 new species descriptions indefinitely. For this we all owe him thanks.

**Literature Cited:**

- Cutler, B. 1987. J. Arachnol. 15: 281-2.  
Parker, J. R. 1987. Newsl. Br. Arachnol. Soc. 50: 7-8.11