

REVIEW. David B. Richman

PROSZYNSKI, J. 1976. Studium systematyczno-zoogeograficzne nad rodzina Salticidae (Aranei) Regionow Palearktycznego i Nearktycznego (A systematic-

zoogeographic study of the family Salticidae-Araneae- of the Palearctic and Nearctic Regions). Wyzsza Szkola Pedagogiczna w Siedlcach Rozprawy Nr 6, 260 p., 450 figs., 219 maps.

Salticid students have tried for years to develop a natural classification for the jumping spiders. The ca. 70 "groups" proposed by Simon (1901, 1903) and the 21 subfamilies proposed by Petrunkevitch (1928, 1937) have long ago proven to be highly artificial and thus of doubtful use. These groupings were to a large extent based on distances between eyes, the number of cheliceral teeth, carapace shape and other characters which often may be influenced by adaptation and convergence. Chickering (1946) took the other extreme view and proposed only two subfamilies, the Lyssomaninae and the Salticinae based on the arrangement of the eye rows. Many other authors have considered the lyssomanids to comprise a separate family. Now Proszynski has examined the placement of the subfamilies in light of a comparison of genitalia, characters which should prove to be relatively stable under conditions of long-term environmental change. He presents a partial sketch of a new system, correcting some of the problems with Petrunkevitch's old subfamilies. He also presents some analysis of the zoogeography of Nearctic and Palearctic salticids for the first time. This is one of the most important works on salticid systematics and zoogeography to be published in recent years. It is most unfortunate that the text is in Polish which I do not read. The English summary is not adequate. The illustrations, while very helpful, would have been more so if the captions had been printed with them instead of separately.

A few criticisms can be made in regard to some of the placements of genera and also of some of the distributional data. The genus *Metacyrba* is very closely related to *Menemerus* and should be placed with the latter genus, possibly in the Aelurillinae. *Paramaevia* is closely related to *Maevia* (*P. michelsoni* is nearly intermediate between the two) and possibly should be associated with the latter genus in the Pelleninae. It will be noted that Barnes' (1958) Marpissinae has been dismembered by Proszynski, with some justification. A recent study of the opisthosomal scales by D. E. Hill indicates that many of the genera in the "Marpissinae" are probably unrelated. The distribution maps for several North American species are inaccurate. Map 9, showing the distribution of *Menemerus bivittatus*, does not indicate its extensive range in Mexico. Map 17, showing the distribution of *Phlegra fasciata*, does not include the range of this species in Florida, where it is very abundant in turkey oak leaf litter. Map 156, showing the distribution of *Plexippus paykulli*, ignores its extensive range into Florida and Mexico. Map 165, showing the distribution of *Salticus scenicus*, indicates that it occurs throughout the Nearctic, except for the far north, when in fact it appears to be absent from peninsular Florida and much of the southwestern United States and Mexico. In these areas it seems to be replaced either by *Menemerus bivittatus* and/or *Plexippus paykulli* or other species of *Salticus*.

Some of the nomenclature used by Proszynski is outdated. *Phidippus variegatus* and *P. audax* (Figs. 19, 22) are synonyms and *P. miniatus* (Fig. 23) is a junior synonym of *P. regius*. *Metaphidippus imperialis* (Fig. 13) is preoccupied and the species takes on the next available name, *M. manni*. Proszynski is not clear about his use of *Dendryphantes* and *Metaphidippus* and I find it difficult to distinguish between the two. I am also not sure whether he intends to synonymize *Tutelina* and the North American *Icius* with *Dendryphantes*,

or *Zygoballus* with *Eris*. I also wish that he had published descriptions along with his drawings (Figs. 311-450) of new taxa.

Most of these criticisms are minor. Much of the difficulty with distribution data was probably unavoidable, given the published material. Whether Proszynski's arrangements of the subfamilies will be accepted remains to be seen, but many of his arguments seem valid. The evidence for the close relationship of *Habrocestum*, *Corythalia* and *Euophrys*, as an example, is convincing. He has, at least, tackled a very difficult problem with the use of a possibly more effective tool than had previously been utilized. His data on the points of origin, migration and radiation of salticids are valuable contributions. I recommend this publication as a first major step toward a more reasonable classification of the salticids and as the only review of Holarctic salticid zoogeography in existence.

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