

COMMENTS ON SOME GENUS AND SPECIES PROBLEMS IN THE SALTICIDAE, INCLUDING WALCKENAERIAN NAMES. G. B. Edwards

Recently I had the opportunity to visit the Museum of Comparative Zoology and the American Museum of Natural History as part of my research into the ecology of eastern *Phidippus*. While at these institutions, I was able to spend a few hours examining some species which have been involved in various nomenclatorial difficulties. The most important problem from the standpoint of my research was the status of *Dendryphantes* as applied to North American species of jumping spiders, since Roewer (1954) lumped nearly all of our dendryphantine salticids into this genus. I examined 5 species of European *Dendryphantes*, including the type-species, *D. hastatus*. While their close relationship to the North American fauna are apparent, certain aspects of the genitalia, particularly the presence of a distinct groove on each side of the epigynum leading into the spermathecal openings, and the position of the male embolus, are different from North American species. Only the male of *D. rudis* has genitalia which resemble those of Nearctic fauna, but this may be superficial. Further study is certainly necessary before final generic designations are possible, but I tentatively suggest that the genus *Dendryphantes* sensu strictu does not occur in North America.

Some future name changes in *Phidippus*:

P. apacheanus Chamberlin & Gertsch. This name is preceded by *P. ferrugineus* Scheffer (type examined) and even earlier by *P. insolens* (Hentz) as determined by the Peckhams (specimens examined). The status of *P. paludatus* Koch is questionable as I have not seen the type, but it is a later name than *P. insolens*, if *insolens* is accepted as a valid determination. Also, the type locality (PA) of *P. paludatus* appears to be out of the range of what has been known as *P. apacheanus*.

P. altanus Gertsch. This is the male of *P. borealis* Banks.

P. peritus Gertsch. This is the male of *P. texanus* Banks.

P. abboti Chamberlin & Ivie. This is a synonym of *P. pius* Scheffer.

I compared the holotype of *P. abboti* with specimens of *P. pius* from its type locality and the only difference was that *P. abboti* was orange while *P. pius* was yellow. This is quite a bit less variation than I have found in other *Phidippus*.

P. mineatus Peckham & Peckham. This is the orange form of the female of *P. regius* Koch.

P. incertus Peckham & Peckham. The Peckhams correctly sunk this species into *P. mystaceus* (Hentz). Why Bryant (1942) resurrected it is open to debate. However, I examined the type and it is definitely *P. mystaceus*, with a slightly aberrant epigynum. This is another species that varies in color ornamentation quite a lot, particularly in the males.

Other notes on *Phidippus*:

P. dorsalis Bryant. Upon examining the types of this species I was somewhat surprised to find that it was distinct, since Bryant's illustrations could have fit a number of species.

P. pulcherrimus Keyserling. This species, known previously only from 2 females as of 1909, is alive and well in Florida and the southern parts of Alabama and Georgia. It is closely related to *P. princeps* (Peckham & Peckham), which it apparently displaces in the extreme southeast.

Other salticids:

Paradamoetus formicinus Peckham & Peckham (types examined). The female has a dendryphantine epigynum, while

unfortunately both of the male's palps are missing. However, it has elongate chelicerae much like several Central American "*Metaphidippus*." They were both probably iridescent gold when alive.

Icius wickhami Peckham & Peckham. Another iridescent spider, this species appears to be related to North American *Pseudicius*, based on leg spination and genitalia (opinion courtesy of D. B. Richman).

Paramaevia Barnes. As inferred by David Richman in Peckhamia 1 (1), this genus should not have been erected and all species in it should revert back into *Maevia*, since *Maevia (Paramaevia) michelsoni* Barnes is intermediate between the two.

Walckenaer's names:

In 1961, Levi and Levi published a paper commenting on Walckenaer's names. Their conclusion was that each systematist should use his/her own judgment when revising a spider group. While this may ultimately prove the most prudent way of handling the problem, I would like to bring out some additional evidence against using Walckenaer's names. Seeley (1928) revised *Tetragnatha* and wrote (paraphrased): "Walckenaer's North American species (of *Tetragnatha*) were evidently described wholly from the drawings of the Bosc and Abbot manuscripts and are therefore invalid." Despite the fact that these drawings were in existence long before the ICZN, they are nevertheless in violation of 2 major requirements for validation of names in the ICZN Rules: 1) They were not published (pointed out by Banks 1901) and 2) Dr. Levi pointed out to me (with credit to Dr. Dondale) that there is no provision in the Rules which allows for the type of a species to be other than an actual specimen. This latter provision in particular seems to invalidate Walckenaer's names based on drawings.

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Three species of salticids with Walckenaerian names (*Metaphidippus galathea*, *M. protervus*, and *Eris marginata*) have become entrenched in the literature. A fourth, *Maevia inclemens*, has more recently come into use, largely because of the generally accepted first reviser principle (Barnes 1955). It is unfortunate that Barnes chose to use *inclemens* over *M. vittata* (Hentz), a name already well-known, because 5 of the 6 species of *Maevia* (including *Paramaevia*) occur in the southeast and the 3 typical *Maevia* species in particular are virtually impossible to separate by their dorsal pattern.

Several other salticid species (as well as other spiders) are at present known by both a Walckenaerian name and another name, contributing to a great deal of instability in the literature while awaiting somebody to revise them. It seems to me that both a practical and a logical step would be to discard the Walckenaerian names except for those already used in revisions, since not only do they contribute to instability, but many interpretations are overly subjective and the application of the names is in violation of established ICZN Rules.

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