

RESEARCH NOTES

NEW PSEUDOSCORPION SYNONYMIES
(PSEUDOSCORPIONIDA, CHERNETIDAE AND CHELIFERIDAE)

During the preparation of a new key to the genera of North American pseudoscorpions, it became apparent that a couple of synonymies existed. In order to clarify the taxonomic picture, the following comments are offered.

Acuminochernes Hoff

Acuminochernes Hoff, 1949, Illinois Nat. Hist. Surv. Bull. 24:476; 1958, Amer. Mus. Novitates 1875:25,47; 1961, Bull. Amer. Mus. Nat. Hist. 122:450.

Phoberocheirus Chamberlin, 1949, Amer. Mus. Novitates 1430:6; Hoff, 1958, Amer. Mus. Novitates 1875:25,47. NEW SYNONYMY.

The genus was first defined by Hoff on the basis of *Hesperochernes crassopalpus* Hoff from Arkansas in a paper published in June 1949. Later that same year Chamberlin published the description of *Phoberocheirus* based upon *P. cribellus*, new species, from Virginia. At the time, it appeared that the large number of sense spots on the medial side of the chelal hand of the male *P. cribellus* were unique and distinguishing; that supposition has gone unchallenged to the present.

I have examined the types of both *H. crassopalpus* and *P. cribellus*, which are in the collections of the Illinois Natural History Survey and the American Museum of Natural History, respectively. Study of the holotype male of *H. crassopalpus* reveals that sense spots are present on the chela just as in *P. cribellus*. Likewise, all other aspects of the morphology of the two forms are very similar; these include the shape and trichobothrial chaetotaxy of the palpal chela, the placement of the tactile seta on the tarsus of leg IV, the acuminate nature of setae *b* and *sb* of the chelicera, and the general structure of the male genitalia. Unfortunately, the type collection of *P. cribellus* consists only of the holotype male. However, I have at hand other undoubted representatives of this form (including females) from Blount County, Tennessee, and Jackson County, Florida. In all the females the spermathecae are long, thin tubules with expanded ends, just as in the paratype females of *H. crassopalpus* (Fig. 1).

All the evidence indicates that the two described forms are conspecific. Therefore, *Phoberocheirus cribellus* Chamberlin must be considered a synonym of *Acuminochernes crassopalpus* (Hoff), and *Phoberocheirus* Chamberlin is a synonym of *Acuminochernes* Hoff.

In addition, in regard to the distribution of the species *A. crassopalpus*, it can be noted that presumed females (unaccompanied by the very distinctive males) have been taken in Cook County, Illinois; Transylvania County, North Carolina; and Rabun County, Georgia. Also, a single male of the species has been reported from Multnomah County, Oregon, by Benedict (1978, Ph.D. Dissertation, Portland State University, Portland, Oregon).

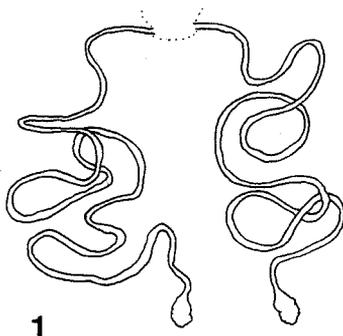


Fig. 1.—*Acuminochernes crassopalpus* (Hoff): spermathecae of female.

Levichelifer Hoff

Levichelifer Hoff, 1946, Bull. Chicago Acad. Sci. 7:486; 1950, Amer. Mus. Novitates 1448:15; 1956, Amer. Mus. Novitates 1804:8; 1958, Amer. Mus. Novitates 1875:34,49.

Ocalachelifer Chamberlin, 1949, Amer. Mus. Novitates 1430:17. Hoff, 1958, Amer. Mus. Novitates 1875:35,49; 1964, Amer. Mus. Novitates 2198:17. NEW SYNONYMY.

A similar situation exists with respect to the genera *Levichelifer* Hoff and *Ocalachelifer* Chamberlin. Hoff described the former in 1946, based upon *Idiochelifer fulvopalpus* Hoff from Tamaulipas, Mexico. Chamberlin's description of *Ocalachelifer*, based upon *Ocalachelifer cribratus* Chamberlin from Florida, appeared in 1949. Hoff (1956, 1964) commented on the similarities between the two genera but continued to regard them as distinct.

I have examined the holotype male and allotype female of *Idiochelifer fulvopalpus* [AMNH] and other specimens of both sexes from Tamaulipas and Texas and the paratype male of *Ocalachelifer cribratus* [AMNH] and other specimens of both sexes from Florida. Careful study and comparison reveal that there are no essential differences in the characters formerly used to separate the two genera. These differences are resolved as follows: (i) tergal keels present in both forms, though less heavily sclerotized in the eastern specimens; (ii) spirally coiled tubules in the coxal sacs of males equally developed in both; (iii) a sclerotic rod in the statumen convolutum of males in both eastern and western specimens, although sometimes difficult to observe due to position of adjacent structures; and (iv) no spine on the tarsus of the first leg, although the outer distal angle of the tarsus is sometimes roughened in both eastern and western specimens. Altogether, the specimens are very similar in general characters and in the special features of the male genitalia and coxal sacs and the fact that females bear many setae on the pleural membranes. The eastern and western forms may be distinguished as separate species on the basis of size, proportions and degree of sclerotization, but they are certainly congeneric.

William B. Muchmore, Department of Biology, University of Rochester, Rochester, New York 14627