

## STATUS OF *LEIOBUNUM SERRATIPALPE* ROEWER (OPILIONES, LEIOBUNIDAE)

The validity of the harvestman *Leiobunum serratipalpe* Roewer (1910) was first questioned by Crosby and Bishop (1924), who suggested that *L. serratipalpe* was probably represented only by immatures of *Leiobunum calcar* (Wood, 1870). Davis (1934) reluctantly retained *L. serratipalpe*, but remarked on the similarity in the male genital morphology between *L. serratipalpe* and *L. calcar*. Roewer (1923, 1957), Bishop (1949), and Edgar (1966, 1971) retained *L. serratipalpe* and *L. calcar* as distinct species. My studies show that *L. serratipalpe* is not a distinct species but is a junior synonym of *L. calcar*.

The original description of *L. serratipalpe* (Roewer 1910) was based on two specimens from Long Lake (New York ?) and Cold River (state unknown). Later, Roewer (1923, 1957) referred to these two as the "male type" and male "cotype." I have been unable to examine the "male type," presumably deposited in the Museum of Budapest, Hungary; but, from published descriptions (Roewer 1910, 1923) of the body size and palpal tarsi, it is probably a female. Through the kindness of Dr. M. Grasshoff I was able to examine the "male cotype" (cat. no. RII/32, and slide no. 10713) deposited in the Natur-Museum Senckenberg, Frankfurt am Main, West Germany. The "male cotype" is an adult female *L. calcar*.

Davis (1934) and Bishop (1949) described and illustrated adult males which they referred to as *L. serratipalpe*. These males were characterized by having a small spur or group of denticles on the palpal femora and by having the penes relatively straight in lateral view (Davis 1934, figs. 32 and 3; Bishop 1949, figs. 81 and 83).

Through the efforts of Drs. D. T. Jennings, Northeastern Forest Experiment Station, Orono, Maine, and M. W. Houseweart, Cooperative Forest Research Unit, University of Maine, Orono, Maine, I was able to examine a large series of *L. calcar* collected in Piscataquis Co., Maine. The specimens were collected in large capacity pitfall traps (Houseweart et al. 1979) deployed in dense spruce-fir forests and in correspondingly similar forest harvested by strip cutting. Traps were installed on 26 May 1977, and removed 4 August 1977, for a 10-week trapping period; traps were installed again on 18 May 1978, and removed on 3 August 1978, for an 11-week trapping period.

Among more than 2000 specimens of *L. calcar* collected, there were 689 adult males, of which five had reduced palpal spurs. Of these five, only one had the genital morphology characteristic of *L. serratipalpe*; the other four had the penes curved in lateral view (Davis 1934, fig. 16; Bishop 1949, fig. 48). Examination of specimens with palpal spurs showed both forms of penes as well as intermediates. No other differences could be found.

#### LITERATURE CITED

- Bishop, S. C. 1949. The Phalangida (Opiliones) of New York. Proc. Rochester Acad. Sci., 9:159-235.
- Crosby, C. R. and S. C. Bishop. 1924. Notes on the Opiliones of the southeastern United States with descriptions of new species. J. Elisha Mitchell Sci. Soc., 40:8-26.
- Davis, N. W. 1934. A revision of the genus *Leiobunum* (Opiliones) of the United States. Amer. Midland Nat., 15:662-705.
- Edgar, A. L. 1966. Phalangida of the Great Lakes Region. Amer. Midland Nat., 75:347-366.
- Edgar, A. L. 1971. Studies on the biology and ecology of Michigan Phalangida (Opiliones). Misc. Pubs. Mus. Zool., Univ. Michigan, No. 144, 64 pp.
- Houseweart, M. W., D. T. Jennings and J. C. Rea. 1979. Large capacity pitfall trap. Ent. News, 90:51-54.
- Roewer, C. F. 1910. Revision der Opiliones Plagiostethi (=Opiliones Palpatores). 1. Teil: Familie der Phalangiidae (Subfamilien Gagrellini, Liobunini, Leptobunini). Abhandl. Naturwiss. Ver. Hamburg, 19(4):1-294.
- Roewer, C. F. 1923. Die Weberknechte der Erde, Systematische Bearbeitung der bisher bekannten Opiliones. Gustav Fisher, Jena, 1116 pp.
- Roewer, C. F. 1957. Über Oligolophinae, Caddoinae, Sclerosomatinae, Leiobuninae, Neopilioninae und Leptobuninae (Phalangiidae, Opiliones, Palpatores). Senckenberg. Biol., 38:323-358.

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