

LEIOBUNUM TRIMACULATUM GOODNIGHT AND GOODNIGHT
IS A SYNONYM OF *L. BIMACULATUM* BANKS
(OPILIONES, LEIOBUNIDAE)

In 1893, Nathan Banks (Canadian Ent. 25: 210) described a striking new species of *Leiobunum* from specimens in the collection of Dr. George Marx. The pairs of brilliant yellowish-white spots on the dark brown to black body provided the obvious name of *bimaculatum*. According to Banks, the specimen came from "southern California." Later, Crosby and Bishop (1924. J. Elisha Mitchell Sci. Soc. 40: 16-18) redescribed numerous specimens from the Gulf Coast of the eastern states, remarking on a fact that had by then become quite obvious: George Marx's locality labels were totally unreliable. Crosby and Bishop examined what they called the male lectotype, an unlabelled specimen in the Museum of Comparative Zoology (MCZ), and doubted that the original material came from California at all, since the species had never been recollected there (and has not been as yet, some 86 years after the publication of the original description). Davis (1934. Amer. Midl. Nat. 15: 669-670), in a revision of *Leiobunum*, listed only southeastern United States records for *bimaculatum*, and refers to a male type. Goodnight and Goodnight (1943. Amer. Midl. Nat. 29: 650-651) thought it necessary to provide a new name, *L. trimaculatum*, for material of *bimaculatum* from Florida. They did not mention the possibility that Banks' original attribution of the type locality might have been in error, but did refer to Crosby and Bishop's 1924 account. Goodnight and Goodnight found differences between their *trimaculatum* types from Ocala, Florida, and Banks' *bimaculatum* type specimen (again, said to be a male). They referred to "a somewhat different arrangement" of the dorsal spots, and averred that when ". . . *L. bimaculatum* and *L. trimaculatum* are seen side by side, they are quite distinct." There also appeared to be slight size differences.

In examining material of various species of *Leiobunum* in order to determine the true extent of the genus, I had the opportunity to study the type specimens of *bimaculatum* and *trimaculatum*, as well as a considerable number of specimens from the Florida State Collection of Arthropods. I could find no distinctions among these specimens, types and otherwise, that would suggest two species are involved.

There are two specimens of *L. bimaculatum* in the type collection of the Museum of Comparative Zoology. One of these, which we may suppose is the original Marx specimen, is a female labelled "type" in Nathan Banks' distinctive handwriting, but has no locality label. The second specimen, a male, is labelled, also by Banks, as having been collected by Davis in Gainesville, Florida; it is not labelled as a type. In neither case had the genitalia been dissected. In the card file on arachnid types, there are likewise two cards. One of these gives the locality as "North America," the other as "Gainesville, Florida." Both cards are clearly marked "type." It is well known that Nathan Banks had the habit of adding additional specimens to type vials, or even substituting newly collected specimens he considered as better examples of the species. In this case it is likely he simply added a vial to the collection. Davis (1934) lists no specimens collected by himself from Gainesville (though he does list Alachua County records), so the addition probably was made in the early 1930s or later. I compared measurements of the leg femora of each of the MCZ specimens with those given by Banks (1893) and by Goodnight and Goodnight (1943). The results did not fully agree in either case, and allowed no conclusion to

be drawn, but I suspect that Davis saw the Marx female, and that Goodnight and Goodnight also examined it, since Davis does not give a type locality (the Marx specimen is unlabelled) and Goodnight and Goodnight persist in using the data published by Banks with the original description. The Gainesville specimen in the MCZ type collection is clearly labelled as to locality, but is not labelled as a type.

Because a specimen (the Marx female) designated as a type by the original author still exists, the use of the term "lectotype" by Crosby and Bishop (1924) was not justified, nor would the designation of the Gainesville male as such be appropriate now. But in the absence of a clearly correct locality for the holotype specimen, it would be best to consider the Gainesville male as a paratype selected later by Banks and to restrict the type locality to Gainesville, Florida.

Since nothing resembling *bimaculatum* has been recollected in California, and I can see no significant differences in the specimens I studied, I believe that Goodnight and Goodnight were in error when they described "trimaculatum" as new, and I relegate that name to the synonymy of *L. bimaculatum*. *Leiobunum bimaculatum* is common along the Gulf and Atlantic coastal plain, from Biloxi, Mississippi, to the South Carolina/North Carolina border, with an isolated record from Virginia Beach, Virginia.

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