

THE MALE OF *PRODIDOMUS RUFUS* HENTZ (*PRODIDOMIDÆ*, *ARANEÆ*)¹

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More than a century ago, in 1847, Nicholas M. Hentz, one of the first students of American spiders, found a spider in a box in a dark cellar in Alabama; it had such unusual characters that he erected a new genus and species for it. Both the generic and specific descriptions are brief, but because of the unusual arrangement of the eyes, the genus has been recognized and twenty-four species from all the warm parts of the world have been placed in it. But the genotype specimen has disappeared and the species has long evaded collectors. In 1892, Mr. N. Banks found a few immature specimens under paper in a house in Shreveport, Louisiana, and published a short description of them. These records have been the only accounts of the American species until 1936, when an adult female was found by Miss Sarah Jones under a stone by the road-side near Dallas, Texas. This I described a few months later. Recently, when looking over some spiders in the Jones Collection, now at the Museum of Comparative Zoology, an adult male was found. This specimen was collected in a house at Denton, Texas, the 4th of December 1946, and is here described as the allotype.

Prodidomus rufus Hentz

Prodidomus rufus Hentz, Jour. Boston Soc. Nat. Hist., 1847, 5: 466, pl. 30, fig. 4; reprint, 1875, p. 105, pl. 12, fig. 4, pl. 18, fig. 9.

Male. Length, 3.0 mm., ceph. 1.7 mm. long, 1.4 mm. wide, abd. 1.5 mm. long, 1.0 mm. wide, palpus, 1.9 mm. long.

Cephalothorax pale yellow, smooth and shining, slightly convex, highest between the second coxæ, no thoracic

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groove or radial furrows, anterior margin broad and slightly rounded, sides rounded, posterior margin slightly less than the anterior; *eyes* eight, anterior row straight by the upper margins, eyes equidistant, a.m.e. largest of the eight, dark, round and convex, separated by about a line, a.l.e. white, convex and round, little more than a radius of the a.m.e., posterior row strongly procurved, the same length as the anterior, eyes white and flat, p.m.e. elliptical, separated by more than the long diameter, p.l.e.

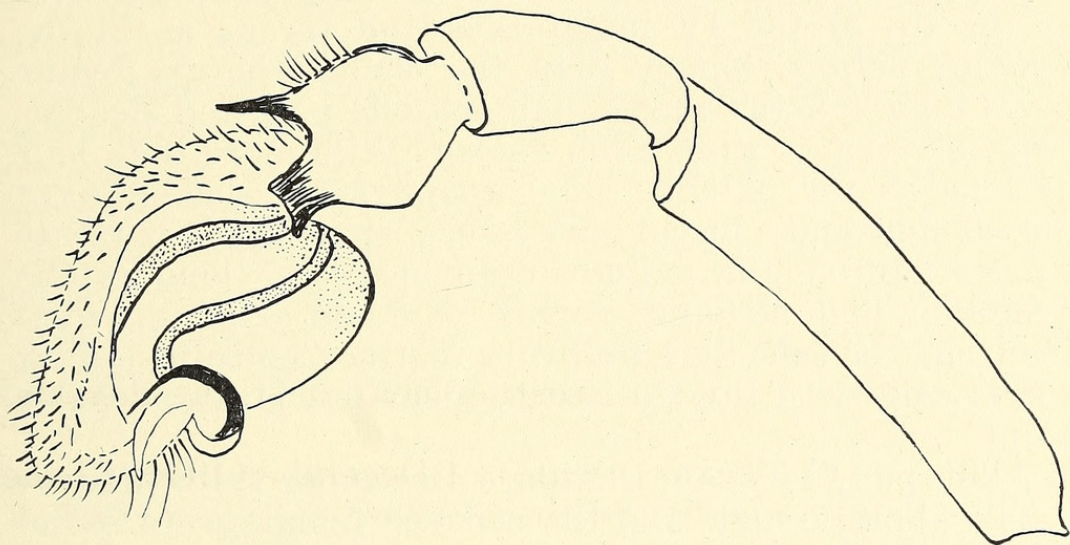


Fig. 1. *Prodidomus rufus* Hentz, left palpus.

elliptical, but the long axis at right angles to the p.m.e.; eyes much closer together than in the female; *quadrangle* narrower in front than behind, and higher than wide; *clypeus* below the a.m.e. about a radius of a.m.e., no hairs or bristles on the margin as in the female; *mandibles* yellow, basal third swollen, only slightly divergent, fang groove oblique, no teeth on either margin, fang long and very slender, with the base not enlarged; *labium*, a dull brown, septum distinct between the sternum, slightly wider than long, tip not rebordered; *maxillæ* about twice as long as the labium, tips inclined and almost touching, pointed, basal third very wide, origin of the palpus at the basal third; *sternum* pale, oval, four-fifths as wide as long, flat, with no hairs, ending in a point between the fourth coxæ; *abdomen* oval, and depressed, a deep red,

covered with short white hairs, posterior third with no hairs and many transverse wrinkles, venter pale, spinnerets pale and smaller than in the female; *legs*, 4-1-2-3, pale, coxæ and trochanters very long, and can be seen from the dorsal side, smooth, I femur with a ventral brush of short colorless hairs, no spines, I coxæ the longest, about twice as long as wide, trochanter a little shorter and more slender, IV coxæ and trochanter subequal, and together as long as the femur, a pair of colorless ventral spines at the distal end of the IV tibia, no trichobothria at the tip of the IV metatarsus and tarsus as in the female; *palpus*, longer than the cephalothorax, femur more than half the length, pale, patella pale and slender, twice as long as wide, tibia darker, little more than half as long as the patella, tibial apophysis a slender dark dorsal spur and a broad dark lateral spur with a truncate tip, as figured, the palpal organ nearly as long as the cymbium, bulb strongly convex, pale and extending onto the tibia, the tube dark and very distinct, embolus a dark spiral coil, with the tip resting near a triangular paler point.

Allotype (♂) Texas; Denton, 4 December 1946, (Jones)

The allotype male and the neotype female were found in quite different habitats, the female out of doors, and the male in a house and they do not agree in all characters. The female is larger, pale, and only tinged with red, on the margin of the clypeus there is a fringe of hairs, and on the fourth metatarsus and tarsus are some distinct trichobothria. The male is smaller, the abdomen a deep red, covered with white hairs, the eyes are more closely grouped, the first femur has a brush of ventral hairs and the trichobothria on the fourth leg are lacking. The difference in color may be due to the habitat and the other differences are probably sexual.

In 1918-19, Dalmas published an excellent revision of the family *Prodidomidæ*, which by then included five genera, all with the same arrangement of eyes and similar spinnerets. The genotype, *Prodidomus rufus*, he knew only from the description of the immature specimens by Banks. Dalmas suggests that the Old World

species placed in the genus *Prodidomus* might not belong there. In his diagnosis of the genus, he stresses two characters that are not found in the genotype. All the Old World species have the anterior median eyes the smallest of the eight, and the fourth trochanter longest, often longer than the fourth femur. This is not found in *P. rufus*. The other species from America, *P. nigricauda* Simon, 1892, and *P. opacithorax* Simon, 1892, both from Venezuela, are described with the eyes of the anterior row subequal. If the Old World species are separated from the American, the genus *Miltia*, Simon, 1870, is available as it was established for the species *Emyo amaranthius* Lucas, 1846, from Egypt. This species has the anterior median eyes the smallest of the eight, and the fourth trochanter is the longest.

In the Dalmas revision, twenty-three species of the genus *Prodidomus* have been recognized. These are found in the warm parts of the world, but only five species are known by both sexes.

LITERATURE CITED

Banks, Nathan

1892. On *Prodidomus rufus* Hentz. Proc. Ent. Soc. Washington, 2, p. 259-261, figs.

Bryant, Elizabeth B.

1936. A rare spider. Psyche, (1935), 42, pp. 163-166, figs.

Dalmas, [Raymond] de

1918-1919. Synopsis des Araignées de la Famille Prodidomidæ. Ann. Soc. Ent. France, 87, pp. 279-340, figs. 1-34.

Hentz, Nicholas M.

1847. Descriptions and Figures of the Araneides of the United States. Jour. Boston Soc. Nat. Hist., 5, p. 467, pl. 30, fig. 4; reprint, 1875, Occ. Pap. Boston Soc. Nat. Hist., 2, p. 105, pl. 12, fig. 4, pl. 18, fig. 9.

Simon, Eugène

1893. Histoire Naturelle des Araignées. 2me ed., 1, pp. 332-337, figs.



Bryant, Elizabeth B. 1949. "The Male of Prodidomus Rufus Hentz. (Prodidomidae, Aranese)." *Psyche* 56, 22–25.
<https://doi.org/10.1155/1949/50897>.

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