A NEW SPECIES OF THE SPIDER GENUS XYSTICUS (ARANEAE: THOMISIDAE) FROM ARIZONA*

BY J. H. REDNER AND C. D. DONDALE
Research Institute, Research Branch, Canada Department of Agriculture, Belleville, Ontario

The North American crab spiders are now comparatively well known taxonomically. This is particularly true of the species in the large genus Xysticus, which has been twice revised continentally by Gertsch (1939, 1953) and treated in more regional works by Buckle and Redner (1964), Schick (1965), and Turnbull, et al. (1965). It seems probable that any additional new forms that will be discovered will be from remote parts of the continent or in sibling relationship with known species. Several species have, however, been described only from one sex.

The purpose of this paper is to describe a distinctive new species of Xysticus from the mountainous parts of Arizona. Its structure clearly places it in the locuples group of the apophysate division of the genus, and its range suggests it to be an inland endemic of the southwestern United States.

Xysticus humilis sp. n. (figs. 1-5)

Male: Total length 3.45 and 3.16 mm.; carapace 1.88 and 1.68 mm. long and 1.82 and 1.59 mm. wide; femur II 1.86 and 1.68 mm. long (measurements made, respectively, on the holotype and a para-type). Carapace low and smoothly rounded from side to side, being little higher at level of legs II than at level of posterior eye row; front nearly vertical; surface with thin coat of short, stiff, recumbent setae; eye area and front set with several spiniform setae; orange-yellow in color, with indistinct pale V in front of dorsal groove, which is uncolored, and with thin black line at side margins. Both rows of eyes recurved; ocular quadrangle wider than long, slightly wider behind than in front; laterals larger than medians; posterior medians only slightly closer to each other than to posterior laterals. Legs pale yellowish, I and II slightly darker than III and IV and with orange-brown tibiae; femur I with 3-4 weak prolateral spiniforms, 1-2 dorsals, 0 retrolaterals; tibia I with 0-3 weak dorsal spiniforms, 0 prolaterals, 4 pairs of ventrals, 0 retrolaterals; tarsal claws

*Manuscript received by the editor January 3, 1966.
REDNER AND DONDALE — XYSTICUS
with 5 teeth. Abdominal dorsum pale yellowish to off-white, with pattern composed of thin lateral black lines on anterior half and 4-5 similar transverse lines posteriorly.

Tibia of palpus with ventral apophysis flattened and bladelike, and bearing small basal lobe; distal tegular apophysis flattened; embolus not thickened at tip (Figs. 2, 4).

Female: Total length (allotype) 5.21 mm.; carapace 2.61 mm. long and 2.46 mm. wide; femur II 2.32 mm. long. Structure and color essentially as in male, but femora I and II concolorous with other segments; abdominal pattern and carapace setation as in Figure 1. Epigynum with deep atrium and paired atrial sclerites as in Figure 3; spermathecae as in Figure 5, each copulatory tube arising posteriorly and forming convoluted mass dorsal to anterior end of spermatheca.

Range: Arizona.


Diagnosis: *X. humilis* most resembles *X. bradti* Gertsch, which is known only from males taken in the State of Chihuahua, and *X. texanus* Banks, a better-known species, from Nuevo Leon, Texas, Arizona, Colorado, and the southeastern United States. Both *X. bradti* and *X. texanus* are relatively small in size and weakly setaceous in carapace and legs. *X. humilis* is distinct from these and all other known species of *Xysticus* in its low, pale, smoothly-convex carapace, in its abdominal pattern of thin black lines, and in details of the external genitalia. The male palpus has a stout basal tegular apophysis with a small irregularity midway along its basal margin (Fig. 4), whereas in *bradti* and *texanus* this structure is slender and smoothly tapered. The distal tegular apophysis further differs from that of *texanus* in being flat and rounded in outline rather than slender and "heedled", while the epigynal atrium is nearly circular instead of broadened, and the atrial sclerites are approximately ovoid instead of elongate and slender.

---

**EXPLANATION OF PLATE 21**

ACKNOWLEDGMENTS

The specimens described in this paper were lent to us by Dr. W. J. Gertsch, American Museum of Natural History, New York, to whom we are sincerely thankful.

LITERATURE CITED

BUCKLE, D. J. AND J. H. REDNER


GERTSCH, W. J.


SCHICK, R. X.


TURNBULL, A. L., C. D. DONDALE AND J. H. REDNER
