# **PROCEEDINGS**

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# A NEW HALOBATINID FROM MEXICO (HEMIPTERA; GERRIDAE)

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The present paper gives distributional records of the genus *Telmatometra* Bergroth in Mexico and the description of a new water-strider belonging to the genus *Trepobates* Uhler, which was found in large numbers breeding in a salt-water lagoon near Acapulco. The type of the new species is in the collection of C. J. Drake.

## Telmatometra whitei Bergroth

Telmatometra whitei Bergroth, Ohio Nat., 7:374. 1908.

Telmatometra whitei Drake and Harris, Rev. Ent., 7:360, fig. 2a. 1937; Journ. Sci. Iowa St. Col., 15: 238. 1941.

Typical specimens of *T. whitei* were taken in a small stream several miles south of Tehauntepec, July 23, 1951, by the authors. It was originally described from Guatemala, and published records as well as collections show that the insect is widely disseminated in Central America and the West Indies.

#### Telmatometra whitei ujhelyii Esaki

Telmatometra ujhelyii Esaki, Ann. Mus. Nat. Hung., 23:133, fig. 4. Telometra whitei ujhelyii Drake and Harris, Journ. Sci. Iowa State Col., 15: 238. 1941.

Variety *ujhelyii* seems to be more widely distributed in Mexico than the typical form. Specimens are at hand from Tehauntepec, July 23, 1951; Puebla, July 20, 1951; Alvarado, July 28, 1951; and Cuidad Valles, Aug. 8, 1951, all collected by the authors. In common with many other species of halobatinids, the color markings of the pronotum vary sometimes considerably in specimens from the same as well as different localities.

#### Trepobates vazquezae, sp. new

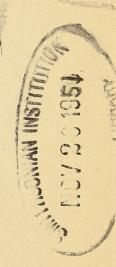
Apterous form: Moderately large, robust, orange-brown with black and dark brown markings; pubescence blackish, semi-reclining; male elongate-ovate, the female stouter and broadly ovate.

Size: Length, 3.70 mm. (male), 4.00 mm. (female); width, 1.60 mm. (male), 1.90 mm. (female).

Head: Width across eyes, 1.08 mm.; interocular space approximately twice the width of an eye. Eyes large, dark reddish brown, converging anteriorly, posteriorly projecting a little along the sides of the pronotum, viewed from lateral aspect quite large and almost circular in outline. Head orange-brown with a narrow border near each eye and sometimes a median longitudinal streak as well as a patch in front black; sides and beneath pale testaceous. Rostrum brownish black with basal seg-

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ment testaceous, the last two segments beneath clothed with whitish hairs. Antennae long, slender, shortly pilose, the pilosity on third and fourth segments beneath longer; segment I longest, stoutest, slightly bowed, slightly enlarged apically, becoming tastaceous basally; formula—I, 86; II, 42; III, 48; IV, 52(male), I, 70; II, 40; III, 48; IV, 52 (female).

Thorax: Pronotum short, nearly twice as wide as long, with three broad longitudinal stripes (medain and one on each side) black, the median and sometimes the lateral ones terminating a little before reaching the hind margin. Mesonotum very large, truncate behind, mostly orange-brown, with three broad basal longitudinal stripes black. Metanotum short, black with a large orange patch behind on each side. Thorax beneath testaceous, sometimes with a little brownish tinge.

Legs: Largely black with orange-brown markings, clothed with short Anterior legs with coxae and trochanters testaceous, the pale hairs. latter sometimes darkened above; femora moderately bowed, concave beneath with a patch of short brown hairs before apex, slowly enlarged apically, not noticably constricted above before apex, there with a broad orange brown band, the basal part above and most of surface on underside testceous of brownish; tibiae black with apical two-fifths orangebrown; tarsi entirely black. Middle legs very long, coxae and trochanters largely orange-brown; femora moderately stout, with a broad apical band and a narrow basal orange-brown stripe on each side, beneath densely clothed with moderately long dark hairs which are not quite as long as the diameter of the segment at their respective points of origin, the tips of the long hairs slightly recurved; tibiae black, very long, slender not quite twice as long as femora (300:172); tarsi entirely black, segment I longer than II (50:38). Hind legs slender, shorter than intermediate pair, almost entirely black, the femora with a narrow longitudinal orange-brown stripe at the base; femora more than twice as long as tibiae (110:50); tarsi entirely black, segment I longer than II (54:30); coxal plates above sometimes with a black patch.

Abdomen: Tergites black with the last one, two or sometimes three orange-brown, the black segments usually bluish pruinose. Connexiva above brown-black with a large orange spot in the middle of each segment, not produced posteriorly, moderately hairy but without long hairs or tufts of long hairs. Abdomen beneath testaceous, clothed with short hairs.

Male: Last ventrite longer than the two preceding segments which are longitudinally ridged on median line. Hind margin of venter and genital segments without long hairs. Genital segments testaceous, the first slightly narrowed posteriorly; parameres curved apically.

Female: Distinctly broader than male. Color and markings similar and as variable as in male, Last segment of venter less than twice as long as the preceding.

Winged form: Pronotum very large, five-sided with apex behind rounded, orange-brown with black markings similar to those in apterous form (black median stripe usually constricted in front, there sometimes with a short median orange stripe in middle of black stripe). Hemelytra long, extending considerably beyond apex of abdomen, brownish black, with short golden hairs on median and outer nervure and also some on breaking suture; length, 3.50 mm., and base to breaking suture, 1.16 mm.

Type (apterous male), allotype (apterous female) and many paratypes (alate, apterous and deälated males and females), taken in a salt water lagoon, Acapulco, Mexico, Aug. 3, 1951, C. J. Drake and F. C. Hottes. Named in honor of Doctora Lenora Vazquez, Entomologist in charge of the National Insect Collection, Mexico City, Mexico.

The orange-brown color, pattern of black markings, absence of long hairs on genital segments and shape of male parameres differentiate at once the new species from its congeners.

Numerous other species of water-striders were collected along with *T. vazquezae* in the salt water lagoon near Acapulco. Biotic conditions, however, were not equally favorable for the multiplication of all of the different species. Based upon the number of individuals, *T. vazquezae* was by far the dominant form; it was present almost everywhere in the open water, including apterous and alate individuals of both sexes as well as nymphs in various stages of development. Deälated males and females were also abundant.

In favorable habitats near the shore, T. vazquezae occurred in large schools of several hundred individuals that were moving about. Here and there, in the open water of the lagoon, some individuals were standing and resting idly, or drifting passively with the air currents; others were gracefully cruising about in quest of prey. When disturbed, they suddenly leap and bound swiftly away by means of their long legs to make their escape.

Taken in the open water along with T. vazquezae were Trepobates Taylori (Kirk.), T. trepidus D. & H., Metrobates denticornis (Champ.), Limnogonus guerini (L. & S.), and an undescribed species of Rheumatobates. Near the shore, often under grasses or other vegetation overhanging the edge of the water, specimens were colleted of Microvelia hinei Drake, M. albonotata Champ., M. robusta Uhler, Velia brachalis Stal, Merragata hebroides B.-White and a new species of Hydrometra. Several specimens were also taken of the cospomolitan Mesovelia mulsanti B.-White. Of the above water-striders, T. vazquezae was the only species not taken in standing or running fresh water in the vicinity of the salt water lagoon.



Drake, Carl J. and Hottes, F. C. 1951. "A new halobatinid from Mexico (Hemiptera; Gerridae)." *Proceedings of the Biological Society of Washington* 64, 141–143.

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