

NEW AMERICAN WATERSTRIDERS (HEMIPTERA)

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This paper is based upon a study of specimens in the U. S. National Museum and the collections of the authors. It contains the descriptions of three new species of Hebridae, one new Veliidae and one new Gerridae. The types have been deposited as stated under the description of each new species. The units of measurement employed in the characterizations of species are all to the same microscale, and may be converted into millimeters by dividing by 80.

***Hebrus camposi*, n. sp.**

Head dark fuscous with some bluish pruinose bordering the eyes and at apex, with short golden pubescence, the median impressed line barely indicated; eyes reddish fuscous, coarsely faceted. Antennae slender, dark fuscous with first two segments testaceous, with scattered long hairs on last three segments, measurements—I, 14; II, 11; III, 19; IV, 15; V, 19. Rostrum long, fulvous with apical half flavous. Legs flavous, slightly darker at joints.

Pronotum dark fuscous, moderately clothed with short golden pubescence, without median longitudinal groove, with prominent humeral angles; collar crescentic, widest at middle, with a transverse row of deep pits along hind border; front lobe with two large pits (one on each side of median line) behind, then demarcated from hind lobe on each side by irregularly arranged pits; humeri impressed within so as to form a shallow longitudinal furrow. Scutellum rounded behind, without apical notch, without distinct median carina. Hemelytra as long or nearly as long as abdomen, with prominent dark fuscous veins, the veins and darkened apical part of corium and clavus with scattered golden pubescence; basal two-thirds of space between corial veins and basal part of clavus (two-thirds of length next to vein and only about one-half within) pearly white; membrane dark fumose, with three whitish spots (an elyptial apical spot and a smaller one on each side at middle), sometimes also another transverse whitish spot on each side of corium near apex. Apterous form unknown.

Length, 1.90-2.20 mm.; width, 0.78-0.81 mm.

Type (male) and *allotype* (female), Guayaquil, Ecuador, Oct. 20, 1952, Dr. F. Campos R., Drake Collection. *Paratype*; 1 female, taken with type; and 2 females, Guayaquil, C. L. Fagan, U. S. Nat. Mus.

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Separated from *H. plaumanni* Porter by the darker color, more slender antennae, pearly white markings at base of hemelytra, non-bifid apex of scutellum and flavous legs.

Hebrus tuckahoana, n. sp.

APTEROUS FORM: Very small, black, with a broadly U-shaped mark at base of head (arms extending anteriorly along sides of eyes) and the anterior and posterior margins of pronotum brown. Head moderately convex above, with a median longitudinal furrow, thinly clothed with very fine, reclining, pale hairs; eyes reddish brown, with large facets; bucculae long, pale testaceous. Rostrum long, testaceous; sulcus deep, uninterrupted between hind coxae. Antennae quite slender, pale testaceous, measurements—I, 16; II, 11; III, 17; IV, 10; V, 16. Legs pale testaceous, the acetabula brownish.

Body beneath black, thoracic pleura dark fuscous. Pronotum dark fuscous to blackish, scarcely more than twice as long as wide (50:22), nearly flat, with a transverse row of irregularly arranged large pits separating front and posterior lobes; front lobe short, not much narrower than hind lobe, with an encircling row of large pits at base of collar; hind lobe scarcely twice as long as fore lobe, with numerous large pits, truncate behind with outer corners obliquely narrowed, the humeral angles low, almost flat, not raised or prominent. Scutellum very short, much wider at base than median length (32:8), the apex very broad, subtruncate and nearly five-sixths as wide as the base. Pronotum and scutellum rather thinly clothed with very fine, decumbent, whitish hairs, these hairs not as numerous on tergites. Male and alate form unknown.

Length, 1.85 mm.; width, 0.82 mm.

Type (female) and one *paratype* (female), both apterous, Tuckahoe, New Jersey, June 2, 1953, Drake Collection.

Allied to *H. buenoi* Drake and Harris, but readily distinguishable by the pale hairy vesture of dorsal surface, especially pronotum, and slenderer antennae. The short-winged or apterous form of the common and widely dispersed *H. buenoi* is not represented in our collections.

Hebrus acapulcana, n. sp.

MACROPTEROUS FORM: Large, dark fuscous-brown with a large, sharply defined, pearly white patch at base of clavus, which extends posteriorly almost to apex of scutellum; membrane dark fuscous with four white marks; body beneath blackish with underside of head acetabula brownish flavus. Head black, without median longitudinal furrow or anastomosing rows of pits, with a little bluish lustre next to eyes; eyes reddish fuscous. Antennae testaceous with a little tinge of brown or fuscous; segments III, IV and V quite slender and rather longly hairy, measurements—I, 25; II, 15; III, 22; IV, 16; V, 20. Rostrum long, flavous, sulcus wide, shallow, dark (sometimes partly brown or flavous), not interrupted between hind coxae, venter not flattened beyond sulcus; sterna and rostral sulcus dark, moderately clothed with short pale hairs.

Pronotum much wider than long (90:50), with median longitudinal furrow rather narrow and not very deep, with front and hind lobe demarcated by an irregular row of large pits, clothed with very short, slightly flattened golden pubescence; fore lobe much narrower than hind lobe, with an encircling row of small pits at base of collar; hind lobe slightly convex, about three times as long as front lobe, with pits only partly visible, the humeri within set-off by a longitudinal impression; scutellum with apex broad, rounded and bifid, with lateral edges feebly raised, with median carina hardly distinct. Elytra nearly as long as abdomen, with corium and clavus black-fuscous, rather densely clothed with golden hairs, with hairs along outer edge a little longer, then shorter and not so numerous in pearly white part of clavus, without distinct median vein, with apical end strongly, sharply, obliquely truncate. Legs whitish testaceous with tips of femora, tibiae and tarsi slightly infuscate.

Length, 2.60 mm.; width, 1.12 mm.

Type (male) and *allotype* (female), Acapulco, Mexico, Aug. 3, 1951, Drake Collection. Paratypes; 2 specimens, same data as type. Closely related to *H. major* Champion, but readily separated from it by the dark and little elevated rostral lamina, the uninterrupted sulcus (between hind coxae) and the non-flattened venter just behind the rostral channel. The antennal measurements are slightly different, and the pearly white mark at the base of clavus is slightly larger.

Merragata brevis Champion

Merragata brevis Champion, Biol. Centr.-Amer., Rhynch., 2: 122-123, 1 fig. 1898.

Merragata brevis Drake and Harris, Not. Mus. La Plata, Arg., 8: 45-46. 1943.

Numerous specimens of this species were taken among growing emergent vegetation in quiet brackish and saline waters near the east coast of Florida. Specimens are at hand from Salt Lake (Mims) and the Indian River (between Cocoa and Indian River City). The species is also recorded in the literature from Texas and California. In the original description, Champion included specimens from Mexico, Guatemala, Panama. In addition to the latter records, Drake and Harris (1943) added Costa Rica.

Microvelia ancona, n. sp.

Small, oblong, velvety blackish fuscous with the basal two-fifths of hemelytra and a large apical spot pearly white. Head black, convex above, with an impressed, median, longitudinal, black line; eyes large, fuscous. Antennae moderately long, flavo-testaceous; segments I and II moderately stout; III and IV quite slender, with scattered long hairs; measurements—

I, 17; II, 12; III, 19; IV, 30, legs moderately stout, flavous, femora unarmed in female.

Pronotum pentagonal in outline, slightly convex above, rounded at apex behind, black-fuscous, without markings, longer across humeri than median length (70:50), without median longitudinal carina or impressed line. Hemelytra as long or nearly as long as abdomen; connexiva entirely dark fuscous, not testaceous beneath the basal pearly white part of hemelytra as in *M. distanti*. Body beneath dark fuscous. Male and apterous forms unknown.

Length, 2.10 mm.; width, 0.75 mm.

Type (female, macropterous), Ancon, Canal Zone, Panama, intercepted in bromeliad plants, at Loredo, Texas, Feb. 26, 1953, in U. S. National Museum.

Separated from *M. distanti* Lundblad by the concolorous connexiva, slenderer legs and slightly small size. In *M. distanti* the visible basal three segments of the connexiva (both dorsal and ventral surfaces) are testaceous beneath the pearly white basal part of hemelytra. The latter breeds in numbers in the rain water pockets of bromeliads in Trinidad.

Rhematobates hamatus, n. sp.

APTEROUS MALE: Small, dark velvety brown with small, slightly testaceous areas as described in structural characters. Antennae moderately long, moderately stout, dark brown with the basal segment testaceous; segment I considerably incrassate, thickest a little beyond base, slightly narrowed anteriorly; II very short, stout, cylindrical; III slender, slightly enlarged subbasally, there with two very long, dark brown hairs, the apical part a little flattened beneath; IV considerably flattened, curved, convex within, with dorsal edge beset with 8 or 9 rather short, dark brown, bristly hairs; measurements—I, 22; II, 6; III, 15; IV, 15. Rostrum brown. Eyes large, fuscous-brown. Body beneath dark brown, the prosternum, acetabula and last two segments of venter testaceous.

Pronotum very short, with the median part broadly testaceous. Mesonotum without color markings, a little wider than long (55:38). Abdomen above concolorous, slowly tapering posteriorly. Genital segments above slowly tapering posteriorly, truncate behind, brown with first segment testaceous, beneath entirely testaceous. Anterior legs rather stout, brown, with coxae, trochanters and femora testaceous. Middle legs very long, brown, with coxae and trochanters testaceous; femora long, considerably swollen; tibiae slender, fringed on the inner side with a row of very long hairs from slightly before middle nearly to apex; tarsi slender; measurements—femora, 60; tibiae, 50; tarsi I, 38 and II, 12. Hind legs much shorter, modified; trochanter rather long, with very long, subapical, hook-like projection on the inner side, which extends considerably beyond apex of abdomen, tapers apically, testaceous at base with hook-part brown and sharply turned downward; femora narrowed at base (as far anteriorly as hook-projection of trochanter), then slightly enlarged (not strongly swollen), with a short fringe of long hairs within subbasally; tibiae slender,

straight; tarsi short; measurements—trochanters, 22; femora, 58; tibiae, 70; tarsi I, 7 and II, 12. Venter with the last two segments testaceous. Length, 1.55 mm.; width, 0.65 mm.

Type (male), Belem, Para, Brazil, September 20, 1950, Drake Collection.

Separated at once from other small species of the genus by the large, subapical hook-like projection of the hind trochanters.

INSECT FACT AND FOLKLORE, by Lucy W. Clausen. xiv + 194 p., illustrated. 1954. The Macmillan Company, New York. Price \$3.50.

This little book, written by Lucy W. Clausen who is in the Department of Public Instruction at the American Museum of Natural History, brings together facts about insects, their folklore, superstitions, products, and the many uses to which they have been put throughout the world. Miss Clausen begins with an elementary discussion of insects in general. From the brief introduction, she leads the reader into the heart of the book, giving many examples to show that the majority of insects are interesting, necessary, and an important part of everyday life. For entertaining and informative reading about insect facts and folklore, Miss Clausen's book can be recommended. L. B.