9-12-1953

Distributional data and description of a new hebrid (Hemiptera)

Carl J. Drake
Iowa State College

Harold C. Chapman
Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, U. S. Department of Agriculture

Follow this and additional works at: https://scholarsarchive.byu.edu/gbn

Recommended Citation
Available at: https://scholarsarchive.byu.edu/gbn/vol13/iss1/3

This Article is brought to you for free and open access by the Western North American Naturalist Publications at BYU ScholarsArchive. It has been accepted for inclusion in Great Basin Naturalist by an authorized editor of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.
The present paper contains the description of a new waterstrider and notes on four other species of the genus *Hebrus* B.-White, family Hebridae, of the Americas. The members of this family are all small or tiny in size and inhabit secluded coves in aquatic habitats. Many species of the genus *Hebrus* find living conditions, if fairly permanent, quite favorable in low partly inundated thickly grassy areas adjacent to bodies of standing and running waters. On the wet ground under dense grasses, the writers have taken in numbers *Hebrus consolidus* Uhler, *H. concinnus* Uhler, *H. comatus* Drake and Harris, *H. burmeisteri* Lethierry and Severin, *H. bueno* Drake and Harris and other species. These wet areas provide suitable places for egg-laying, an abundance of food, shelter from unfavorable weather and escape cover from enemies. In seasons of severe drought, both adults and nymphs escape desiccation by migrating to the bordering waters. As waterstriders are naturally adapted to a semiaquatic life, temporary foods do not seriously affect them.

The family Hebridae is represented in all six continents. *Hebrus* is by far the largest genus in both hemispheres. Thirty-five species of hebrids, divided among three genera, have been described from the Americas.

On account of their small size and singular habitats, hebrids are rarely collected and poorly represented in most collections. The records herein are based entirely upon specimens in the collection of the author. The type of the new species is in the Drake Collection.

**HEBRUS PUDORIS** Drake and Harris

*Hebrus pudoris* Drake and Harris, Notas Mus. La Plata, Arg., 7:56-57. 1943.

Originally described from specimens taken in Mexico. Specimens are also at hand from Torres and San Jose, Costa Rica.

**HEBRUS PRISCUS** Drake and Harris

*Hebrus priscus* Drake and Harris, Notas Mus. La Plata, Arg., 7:57-58. 1943.
The types were collected in Brazil. Specimens are also at hand from Panama (Barro Colorado), Paraguay (Lake Macara) and Peru.

HEBRUS CONSOLIDUS Uhler


This is one of the commoner and more widely disseminated species in the genus. We have examined many alate and brachypterous individuals from Florida (Orlando, Cocoa, Center Hill, Apapka, Union Park, Gainesville, Lakeland, Titusville, Florida City, South Bay and Lake Placid), Mississippi (Ocean Springs and Gulf Port), Guatemala (Los Amates), Mexico (Tehauntepec and Alvarado), Panama (Barro Colorado) and Trinidad, B. W. I. The Trinidad specimens were collected by H. E. Summers with the types. The short-winged form is smaller than alate individuals, with wing-pads narrow and slightly more than half as long as in the macropterous forms. The pads (including membrane) are deep dark brown with a small white spot at the base.

HEBRUS USINGERI Drake and Harris

Hebrus usingeri Drake and Harris, Notas Mus. La Plata, Arg., 7:54-55. 1943.

The types were collected in Mexico. We have specimens from Pueblo and Cuidad Valleys, Mexico.

HEBRUS AMNICUS Drake and Chapman, sp. new

Brachypterous form: Long, moderately stout, blackish fuscous with a slightly paler basal spot on wing pads; dorsal surface slightly bluish; abdomen beneath black with considerable bluish; thorax beneath velvety brownish black, only slightly bluish; acetabula, bucculae, genae, pronotal collar and rostral laminae fuscous-brown; rostrum pale testaceous. Pubescence on head and pronotum short, golden; on wing pads slightly longer, golden; on abdomen and con-nexiva grayish golden, on venter very dense, a little longer, grayish brown; on underside of thorax very sparse, short and golden. Eyes reddish. Antennae dark fuscous with the last three segments brownish testaceous. Length, 2.45 mm.; width, 0.85 mm.

Head long, subporrect, without distinct medial longitudinal sulcus or anastomising punctures; median length, 0.70 mm.; width across eyes, 0.48 mm. Eyes rather small, coarsely faceted. Rostrum
Sept. 12, 1953  A NEW HEBRID (HEMIPTERA)  11

long; rostral laminae widely separated, entirely open behind. Bucculae long, entirely open in front. Antennae moderately long; segments I and II moderately incrassate, shortly pilose, the second segment smaller; III, IV and V very slender, rather densely clothed with long pale hairs; measurements—I, 25; II, 18; III, 24; IV, 16; V, 25. (80 units equal one millimeter).

Pronotum much wider across humeral angles than median length (64·38), constricted and shallowly sulcate just in front of the middle so as to form distinct fore and hind lobes, with an irregular row of large pits in the shallow transverse sulcus between the lobes; anterior lobe much narrower (48·64) and shorter (14·42) than hind lobe, with an encircling row of fairly large pits just back of narrow pronotal collar; hind lobe sharply narrowed anteriorly in front of humeral angles, the humeral angles a little raised, fairly prominent and impressed within. Scutellum with the large deeply impressed basal part divided by a median carina, roundly notched at apex, wider at base than median length (34·14). Hemelytral pads long, rather broad, slightly more than one-half as long as hemelytra, membrane quite large, larger than corial part, broadly rounded behind, deep fuscous-black, without visible veins, without pubescence; basal part with large median and outer veins, clothed on veins and cells between veins with golden pubescence, sharply obliquely truncate behind, with the inner margin not quite attaining apex of abdomen, the outer margin much longer. Connexiva moderately wide, slightly bluish. Legs moderately long, the femora a little enlarged, clothed with short pale pubescence. Male and volant form unknown.

Holotype (female) Calhoun Co., Ga., Feb. 4, 1953, taken under stones in hibernation.

This species is longer and the anterior part of pronotum more constricted than in other species of hebrids found in the Atlantic and Gulf States. The distinctly bilobed pronotum, very large wing pads, and antennal measurements separate this insect from H. consolidus Uhler and H. concinnus Uhler. Consolidus has a prominent white mark at the base of the hemelytra.