

New and Noteworthy Forms of North American *Miridae* (Hemip.)*

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In working over considerable miscellaneous material in the family *Miridae* the writer has found a few species that are of particular interest and takes occasion to present part of his findings in the present paper.

Sericophanes ocellatus Reuter.

While studying *Miridae* in the collection of the United States National Museum the writer found two specimens bearing the label, "Texas Belfrage" which evidently represent original type material of this species. These specimens came from the C. V. Riley collection and no doubt were acquired from Mr. Belfrage at a time when that collector sent material to various entomologists and museums. Dr. Reuter described the genus *Sericophanes* and the single species *ocellatus* in his paper of 1875, "Capsinae ex America boreali in Museo Holmiensi asservatae descriptae ab" (Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar, 1875, No. 9, Stockholm), from an assemblage of North American Hemiptera collected by Mr. Belfrage and which in some way were acquired by the Stockholm Museum. It was this wholesale shipment of North American Hemiptera to European specialists in the early days that resulted in the description of many of our species. This loss of types to American students has made it difficult to always name our species accurately and some may never be known with certainty until comparison is made with the type specimens.

The following notes are taken from a study of the above type material and are given here for comparison with the northern species described below:

♂. Length to tip of membrane, 2.6 mm.; length of pronotum .43 mm., width at base .71 mm., apex .37 mm.; head, width across the eyes .60 mm., width of vertex .25 mm.; color of head, thorax, legs and ab-

*Contribution from the Department of Entomology of Cornell University.

domen, yellowish brown, or "dilute cinnamomeus" of Reuter. The ocellate spot on the clavus and the pruinose bands across the corium are quite similar to *noctuans* but the ground color is lighter.

Dr. Reuter, 1910, placed the genus *Sericophanes* in his division *Cremnocephalaria*, a group having the claws destitute of arolia. Perhaps Dr. Reuter had poor material from which to work since the present writer finds after observations on

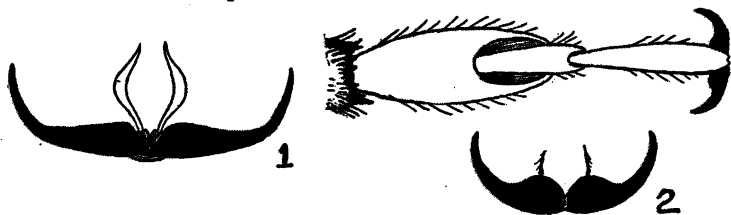


Fig. 1.—*Sericophanes noctuans*, showing the claws and type of arolia.

Fig. 2.—*Largidea davisi*, tarsus and claws, showing type of claws and absence of arolia.

several specimens with the aid of the binocular microscope that the claws bear free arolia with converging tips (fig. 1). This type of arolia places the genus close to *Pilophorus* and *Ceratopsus* and in the tribe *Orthotylini* of Mr. Van Duzee's recent tables.

***Sericophanes noctuans* new species.**

Larger and darker colored than *ocellatus*, but otherwise bearing a close resemblance.

♂. Length, 3.6 mm. *Head*: width across the eyes .71 mm., width of vertex .28 mm., length .45 mm., height at base .37 mm.; eyes large and coarsely granulated, height .43 mm., dark purplish brown in color; jugae, lorae, and tylus reddish brown, the jugae showing red most plainly; vertex dark chestnut like the pronotum, smooth shining, carina nearly horizontal and turning forward at each side to meet the eye, slightly depressed bordering the carina; base of the tylus with a prominent hair at each side. Rostrum scarcely attaining the posterior margin of the hind coxae, yellowish brown, basal segment dark brown, the apex blackish.

Antennae: segment I, length .25 mm., yellowish brown, with three or four prominent hairs on the inside; II, length 1.25 mm., yellowish brown, slightly darker toward the apex; III, length .88 mm., dark fuscous to blackish, brownish at the base; IV, length .60 mm., slightly flattened, dark purplish to blackish; all the segments with very fine pale pubescence.

Pronotum: length .57 mm., width at base .88 mm., apex .37 mm.; dark chestnut or blackish, smooth, shining, strongly declivitous, devoid of calli, collar narrow but distinct, lateral margins of the disk indistinct, rounded. Scutellum same color as the pronotum, basal lobe prominent, strongly sloping backward, sharply cut away at each side; apical lobe small, moderately arched and rounded at the sides, very finely transversely rugose. Sternum dark chestnut, shining; lobe of the metasternal orifice projecting laterally very strongly.

Hemelytra: width at tip of corium .91 mm., across the middle only .77 mm.; clavus dark chestnut brown on the basal half and tip, golden brown bordering the scutellum, pruinose on the exterior basal half; apical half of the clavus with a cream colored spot which extends laterally to the margin; corium dark velvety brown, the cuneus and inner apical angles of corium with dark golden brown; base of corium, a narrow band across the middle, and exterior half of the apex, pruinose; sparsely covered with golden hairs; cuneus poorly defined from the corium inside of the fracture, scarcely deflected; membrane evenly clouded, pale across the basal half of the large cells and bordering the apical one-third of the cuneus.

Legs: fore coxae yellowish brown like the femora, darker at the very base; middle coxae dark brown; hind coxae pale, brownish at the base; femora dark yellowish brown, anterior pair paler; tibiae dark brown; tarsi pale brown, the apex and claws blackish.

Venter: long and slender, noticeably flattened on the basal half, first two segments yellowish brown, beyond this dark chestnut to blackish, shining; genital claspers small.

Described from 9 ♂♂, June 22 to Aug. 10, Batavia, New York, all of which came to the light in the writer's laboratory; 1 ♂, July 2, McLean, New York.

Type: ♂, Aug. 8, Batavia, New York; author's collection.

Mr. C. P. Alexander reports having seen this species flying up in large numbers from the grass after sundown. Brachypterous and macropterous females of what is doubtless this species rather than the *ocellatus* from Texas, are well described by Prof. Osborn (Proc. Iowa Acad. Sci., V, p. 238, 1898); the nymphs and adults found occurring on grassy ridges.

***Clivinema regalis* new species.**

Bright orange red with blackish hemelytra, antennae and tibiae; structurally quite similar to *villosa* but differing greatly in size and color, the pubescence without prominent recurved tips. Claws toothed

at the base, destitute of arolia, similar in structure to *villosa*. Pronotum with an apical gibbosely convex area, stricture apparent only at the sides from which an impressed line extends to the rear margin of the calli.

♂. Length 5.7 mm. *Head*: width across eyes 1.05 mm., width of vertex .54 mm., length .51 mm., height at base .60 mm.; pale pubescent, vertex convex, ecarinate; orange red, tylus and a transverse impression at the base black, sutures and eyes blackish, vertex usually with two longitudinal fuscous to blackish rays. Rostrum scarcely attaining the posterior margin of the sternum, blackish, the first two segments mostly reddish.

Antennae: segment I, length .43 mm., width .14 mm., blackish, sometimes with reddish; II, length 2.05 mm., width .14 mm., quite uniformly thickened, black, thickly clothed with short black hairs; III, length .60 mm., slender, width .06 mm., black, only a few hairs with very fine pubescence; IV, length .40 mm., similar to III.

Pronotum: length 1.42 mm., width at base 1.99 mm., apex .80 mm., height at apex .91 mm.; bright red or orange red when faded; disk shallowly punctate, more or less transversely rugose; calli apparent as impressed ovals, usually black, shining, joined at the side by an impressed line leading to the anterior angles, thus defining the arched apical portion or gibbosely convex hood; coxal cleft extending high as the lateral margin of the disk, separated from the above impressed line only by a thin lateral projection. Scutellum bright red, pubescent, strongly convex, arched, with a broad median longitudinal impression. Sternum red, side pieces covered with a white flocculent wax-like material, often present in greater degree along the full length of the body.

Hemelytra: greatest width 2 mm., black, shining, somewhat translucent, roughly wrinkled, covered with long erect pale pubescence. Membrane evenly clouded with fuscous, except a pale spot at the apex of the cuneus, veins dark fuscous.

Legs: bright red, shining, apices of the femora and a longitudinal bar or row of dots on the under side, blackish; tibiae and tarsi black.

Venter: red, pale pubescent; genital claspers blackish, dextral clasper small, sinistral clasper long and slender, quite similar to that in *Largidea rubida* and *davisi*.

♀. Length 5.6 mm., width 2.5 mm., more robust than the male; second antennal segment more slender, thickest at the apex; vertex with two longitudinal black rays; the femora more so and the posterior margins of the abdominal segments and surrounding the ovipositor, blackish; entire body above and below coated with the white flocculent wax like material.

Described from 3 ♂♂ and 3 ♀♀, July 21-28, 1914, El

Paso, Texas, collected by Dr. J. Chester Bradley, who remarks: "Females were plump and very sluggish; collected from a shrub on the open mesa, possibly an Ocatilla which was in leaf at that time, on the side of Mt. Franklin not far outside the city limits of El Paso."

Type: ♂, July 28, El Paso, Texas, J. Chester Bradley; Cornell University collection.

Largidea davisii new species.

Resembles *grossa* in size and color but differs widely in the form of the antennae and the length of the rostrum; dark fusco-rufus brown, head and body covered with heavy pale yellowish pubescence, more or less matted and depressed. Length 6 mm.

♀. *Head*: width across eyes 1.28 mm., width of vertex .77 mm., length .51 mm., height at base .80 mm.; impunctate, darker than color of the body, the vertex and sutures about the tylus, blackish; base of tylus clearly defined, a short narrow longitudinal pit at the base similar to that in *rubida*; a prominent fovea just above the base of each antenna, vertex ecarinate, head shorter and more compressed as compared with *rubida*. Rostrum extending only slightly beyond the posterior margin of the fore coxae, or to the middle of the sternum; the same in both sexes.

Antennae: segment I, length .31 mm., greatest thickness .14 mm., dark rufus-brown, the apex and base blackish; II, length 1.28 mm., being exactly the width of the head, or less than the length of the pronotum, greatest thickness .14 mm., fusiform, not flattened as in *grossa* or with depressions of any kind, thickly clothed with dark brown hairs, a few bristles intermixed, rich rufus-brown to wine color, darker toward the apex; III, length .37 mm., with dark fuscous; IV, .37 mm., same color as III.

Pronotum: length 1.59 mm., width at base 2.19 mm., apex 1.14 mm., dark fusco-rufus, the polished hook-shaped line about the calli, black; calli as in *rubida*, typical of the generic characters; disk behind the calli coarsely, deeply and closely punctate, more finely punctured before the calli; lateral margins sharply defined as in *rubida*. Scutellum roughly transversely rugose along a slightly sulcate median line. Sternum with longitudinal median impressed line, opaque beneath with a few scattered pubescent hairs, shining at the sides and with matted pubescence.

Hemelytra: greatest width, ♀, 2.5 mm., ♂, 2.1 mm.; clavus, corium, and cuneus uniformly colored dark reddish brown, inclined to wine color in the more translucent parts; membrane evenly shaded with fuscous, veins darker tinged with reddish; closely covered with fine

and shallow punctures; clothed with short oppressed yellowish pubescence.

Legs: dark fuscous brown, femora with a longitudinal row of dark spots beneath, not visible in certain lights; tarsi blackish, the basal segment flattened beneath and extending well under the second segment (fig. 2).

Venter: mostly dark grayish brown, blackish on the posterior margin of each segment; spiracles conspicuous, appearing as sunken black spots; rather long and prominent pale yellowish pubescence.

♂. Similar to the female only more slender: length 5.7 mm. The antennae and character of the first tarsal segment do not differ from those of the female, though the length of the second antennal segment (1.28 mm.) is slightly longer than the width of the head (1.14 mm.) across the eyes. The male genital forceps are quite similar to those of *rubida* thus not affording good specific characters but on the other hand showing generic relationship.

Described from a male and three females, Sept. 24, 25, Promised Land, Long Island, New York, collected by Mr. William T. Davis and Mr. G. P. Engelhardt. I have also seen a half dozen other specimens from the same locality.

Type: ♀, Sept. 24, Promised Land, Long Island, New York, Wm. T. Davis; author's collection.

The writer has studied Uhler's type specimen of (*Clivina*-*ma*) *rubida* in the National Museum collection and was unable to distinguish from it Colorado specimens which were later determined as *marginata* by Mr. Van Duzee. It is evident that the character of the antennae and the length of the rostrum cannot be taken as generic characters but only as specific, since these differ in each of three species. The form of the pronotum and particularly the character of the calli and basal segment of the tarsi appear to be distinctive of the genus *Largidea*.