

New Genera and Species of North American Hemiptera

BY E. P. VAN DUZEE
University of California, Berkeley, Cal.

The following new genera and species of Hemiptera are published now so the names may be included in a forthcoming check list of the North American Hemiptera.

Cnemodus inflatus n. sp.

A little longer and darker than *mavortius*, with the rostrum shorter and the anterior lobe of the pronotum more inflated. Length 9-10 mm.

Piceous black, impunctate. Elytra dark castaneous with a pale costa; legs, antennæ and rostrum honey-yellow. Head as in *mavortius*, the antennæ a little paler, with the tip of the third and the whole of the fourth joint fuscous. Rostrum attaining the insertion of the anterior feet, the extreme tip black. Pronotum stout, anterior lobe strongly inflated, ovate, much wider than the posterior lobe and fully as wide as the broadest part of the closed elytra; collar narrow but distinct as in *mavortius*; posterior lobe but slightly developed, flat, scarcely flaring and not at all elevated behind; lateral margin tumid, posterior feebly arcuated; surface rugulose, dark castaneous. Scutellum piceous black becoming castaneous at the acute apex, surface irregularly punctured, with a very obscure median carina. Elytra dark castaneous, coarsely but sparsely punctured, costa pale to beyond the middle, the extreme base sanguineous where covered by the humeri. Membrane rudimentary, the nervures scarcely indicated. Legs pale castaneous or honey-yellow, becoming whitish basally; anterior femora thicker than in *mavortius*, similarly armed with about six spines, its tibiæ strongly curved at base as far as the long arcuated spine which is placed nearer to the base than to the apex; all the tibiæ blackish. Beneath dark castaneous becoming blackish on the pleuræ; the stigmata and connexivum almost sanguineous.

Described from two brachypterous males from North Carolina: one taken by Mr. W. J. Palmer of Buffalo on Balsam Mountain; another taken by Mr. Manee at Southern Pines, and four examples received from Mr. H. G. Barber.

I have seen both sexes of both this species and *mavortius*, and there is no doubt but they are distinct even should there be a question which is the true *mavortius* of Say. I am convinced that *brevipennis* H. S. and *alacris* Walker are the same as Say's species, and that all refer to the smaller form which has the anterior lobe of the pronotum sub-cylindrical and narrowed anteriorly, the rostrum attaining the insertion of the intermediate feet and the base of the ultimate antennal joint frequently paler. It is probable that in this as in the allied species the macropterous examples have the posterior lobe of the pronotum more developed and flaring, so that character in the above description should not be considered as of specific value.

Opisthuria clandestina n. sp.

Color light red or orange-red; eyes, antennæ, legs, tip of the abdomen and elytra black; the costa broadly pale. Head before more or less infuscated, the dark color usually covering the vertex, front and clypeus. Antennæ black; basal joint a little longer than the greatest length of the head; second about one-half longer than the first; third a little shorter than the second; fourth two-thirds the length of the third. Loræ separated from the cheeks by a distinct suture. Pronotum deeper red, immaculate; collar longer than the callosities and very convex. Scutellum with a dark red shade covering its basal disk; the anterior lobe covered by the pronotum. Elytra with the costa considerably expanded beyond its basal one-third; black, with a broad whitish costal vitta, which may become fulvous or even red, but is always paler than the pronotum; this pale costal vitta covers the cuneus excepting only its inner margin. Legs black with the coxæ, trochanters and base of the femora pale. Venter red with the genital segments black in both sexes.

Described from numerous examples taken by me at Crescent City, Sanford and Fort Myers, Florida, in April and May, 1908. This species is No. 143 in my report on Florida Hemiptera published in

1909 and was listed as "Resthenia sp." It differs from Reuter's description of his genus *Opisthuria* only in having the loræ well distinguished from the lower cheeks and the base of the scutellum covered, but these characters alone would scarcely seem sufficient for the establishment of a new genus.

Creontiades debilis n. sp.

Smaller and slighter than *rubrinerve*; pale yellowish-testaceous with the tibiæ more or less green. Length 6 mm.

Head about as in *rubrinerve*, but with the vertex more prominent before and separated from the clypeus by a very deep incision. Basal joint of the antennæ stout, fusiform, the remaining joints more slender, subequal in thickness. Pronotum proportionately broader, the costa very slightly arcuated. Rostrum attaining the apex of the hind coxæ. Color a pale yellowish-testaceous or almost whitish, with a faint tinge of green in places, especially on the tibiæ and tarsi and on the commissural nervure of the elytra; extreme apex of the scutellum fuscous. Eyes and tarsal claws brown; apex of the rostrum black.

Described from two females and one mutilated specimen taken on Tybee Island, Georgia, July 26th, 1913, by Prof. J. C. Bradley. At Estero, Florida, I took one male, which differs only in being a little stouter and more opaque, with the vertex, base of the antennæ and the pronotum touched with sanguineous and the tip of the scutellum concolorous, not fuscous as in the types. In this male the tibiæ and tarsi are green, as in the type female, and I believe it will prove to be the male of this species. It is possible the type females may be somewhat teneral.

Platylygus n. gen.

Closely allied to *Camptochilella* Reut., but with the head longer and more porrect.

Body oblong, polished; head and scutellum minutely transversely rugose; pronotum and elytra punctate. Head produced, strongly oblique; one-half as wide as the base of the pronotum; anterior pronotal angle at the middle of the eyes; viewed from above the head is but little shorter than the pronotum, its length about equal to its

width; viewed from the side it is produced beyond the eye for about the length of the eye; facial angle less than a right angle. Vertex opaque, obliquely striate, with a longitudinal sulcus, distinct at base; base of the vertex slenderly carinate and a little angled at the middle. Clypeus distinctly prominent, strongly distinguished from the front; jugæ convex, almost tumid; loræ convex, distinguished by a slight suture below the antennæ; gula short, oblique. First antennal joint surpassing the clypeus by one-half its length; second scarcely thinner at apex; third and fourth together about two-thirds the length of the second and distinctly thinner, but scarcely setaceous. Pronotum distinctly transverse, moderately sloping; hind margin feebly sinuated; sides straight with a smooth carina; anterior with a slender smooth collar; callosities prominent, contiguous, nearly attaining the anterior margin, posteriorly with an angular emargination between them. Basal lobe of the scutellum a little exposed. Elytra surpassing the abdomen, parallel or nearly so; cuneus long, nearly horizontal; fracture small; smaller areole of the membrane unusually large. Prosternal xyphus conspicuously margined. Rostrum long, reaching the apex of the second ventral segment. Hind tarsi long, second joint on its lower margin distinctly shorter than the first. Arolia small, widely divergent.

This genus differs from *Lygidea* by the longer first joint of the hind tarsi, the more produced and subhorizontal head, opaque vertex with an angled basal carina, longer basal joint of the antennæ, longer rostrum, more slender pronotal collar and the more irregular and distinct pronotal puncturation. It is nearer *Camptochitella*, but the much longer and more horizontal head, the more opaque vertex, the more distinct incisure between the clypeus and vertex, the longer rostrum, the approximate callosities and the longer first joint of the hind tarsi will distinguish it.

Type: *Lygidea rubecula* var. *lurida* Reut., 1909 (founded on Reuter's unique type specimen now in my collection).

Diplozona n. gen.

Closely allied to *Cimatlan* Dist. Body small, polished; coarsely punctured; antennæ incrassate.

Head nearly horizontal, considerably produced, surpassing the eye by nearly the width of the eye below. Vertex opaque, transversely rugose, longitudinally sulcate on the middle line; base ecarinate; clypeus but moderately prominent, rather strongly arcuated, scarcely distinguished from the front at its base; cheeks prominently convex; gula horizontal; facial angle less than a right angle. Eyes oblong-ovate, a little oblique, scarcely sinuated before. Antennæ inserted close to the eye and much below its middle; much thickened and clothed with short stiff hairs; first joint short, oblong, abruptly narrowed at its base, surpassing the clypeus by a little more than half its length; second joint about as long as the pronotum, distinctly clavate, its apex being thicker than the first joint; third and fourth fusiform, as thick as the apex of the second, the anastomoses very slender. Rostrum slender, attaining the apex of the intermediate coxæ. Pronotum transverse, strongly narrowed before, the anterior angles a little prominent, attaining the middle of the hind margin of the eyes; hind margin strongly arcuated, covering the basal lobe of the scutellum; sides carinated and a little sinuated; apex with a broad and prominent collar; surface rather convex and with the propleura strongly deeply punctured. Callosities oval, prominent, distant but connected by a raised smooth area anteriorly. Prosternal xyphus distinctly convex with a slenderly carinate margin. Scutellum broader than long, moderately convex, strongly punctured. Elytra moderately convex, strongly punctured; cuneus considerably deflexed; membrane biareolate, surpassing the abdomen by about one-half its length. Second joint of the tarsi much shorter than the first and third. Arolia as in *Camptobrochis*, short and broad, lying against the base of the long curved claws. Oviduct of the female long; reaching well toward the base of the venter.

This genus is closely related to *Cimatlan* but differs in the thickened antennæ and the convex xyphus. It bears a strong superficial resemblance to *Camptobrochis* but may be at once distinguished by the opaque, sulcate vertex and the stout antennæ.

Type of genus, *Diplozona collaris* n. sp.

I might add here that for the present I am unable to find any characters by which to distinguish genus *Eustictus* Reut. from

Cimatlan Dist. I would also add that it seems to me necessary to separate *Camptobrochis*, *Deræocoris*, and their allies, in a distinct division, *Deræocoraria*, of the tribe Capsini. This division may be distinguished by having the arolia short and united with the base of the claws or at times nearly or quite wanting, and usually there are two approximate, straight, parallel setæ between the bases of the claws which might be mistaken for arolia. I am unable to find that Reuter has mentioned the form of the arolia in any of these genera but on the contrary has seemed to consider the free divergent arolia as characteristic of the Capsini. The species in this division have a polished, usually convex body, strongly punctured above, with a small head and a decided tendency to an uniareolate membrane and convex and ecarinate xyphus, thus leading to the Bryocorinæ with which they are almost certainly related.

Diplozona collaris n. sp.

Aspect of *Camptobrochis nebulosus* Uhl. Testaceous varied with piceous-brown. Length 4 mm.

Vertex nearly quadrate; pale with a broad median fuscous cloud including a short pale line above the base of the clypeus; eyes black. Basal joint of the antennæ piceous; second pale with the clavate apex rufous and the extreme base fuscous; third and fourth piceous. Pronotum largely fuscous, the posterior submargin and humeral angles pale, the carinate edges whitish; three pale spots on the disk, more or less confluent, and a transverse anterior band covering the callosities pale tinged with fulvous. Exterior angles of the scutellum and a short median line posteriorly pale. Clavus and disk of the corium posteriorly infuscated; embolium hyaline and impunctate, with a rufous spot at its apex; apex of the cuneus fuscous; punctures of the whole upper surface fuscous. Membrane with a faint longitudinal cloud on either side toward the apex, the nervures heavy and piceous. Beneath pale, the propleuræ and sides of the venter dark or piceous; the tibiæ broadly biannulate with fuscous, at least on the hind pair.

Described from one pair taken at Punta Gorda, Fla., November 13, 1911, and received from Mr. H. G. Barber, and two females taken by me at Estero, Fla., in May, 1908.

Klopicoris n. gen.

Aspect of *Camptobrochis* but with the form of *Sixeonotus* nearly. Prosternal xyphus strongly convex, almost tumid, without a marginal carina; pronotum with a conspicuous apical collar; elytral membrane with but one areole; hind tarsi short, basal joint enlarged and strongly oblique at apex, extending beyond the very small and oblique second joint; third joint terete, not at all expanded; tarsal claws large, strongly curved, with the short and broad arolia united with their basal one third.

Head and pronotum almost exactly as in *Camptobrochis nebulosus*. Head nearly vertical, the facial angle a little less than a right angle, viewed from before broad and transverse, the portion before the eyes narrow; vertex immarginate at base, front flat. Eyes elongated, reaching almost to the gula. Clypeus prominent, its depressed base well above the line of the antennæ; gula short, oblique. Antennæ short, inserted a little below the middle of the inner margin of the eyes; basal joint short, scarcely attaining the apex of the clypeus; second about as long as the pronotum, slightly but distinctly clavate at apex; third and fourth together about two-thirds the length of the second; fourth hardly longer than the first; these joints more slender but not setaceous. Pronotum strongly convex in both diameters, steeply declined anteriorly; sides and hind margin strongly arcuated; anterior margin short with a conspicuous convex collar; callosities small, contiguous, placed close to the anterior margin; surface coarsely remotely punctate. Scutellum large, rounded behind, tumidly convex and polished. Elytra broad and short; scarcely longer than the abdomen; a little wider behind; costa narrowly expanded towards the base and feebly sinuated at the middle; surface polished, impunctate, bullate behind, the claval suture with a single row of punctures; cuneus broad, transverse, almost vertical, its apex obtuse, fracture deep. Membrane nearly vertical, uniareolate. Osteolar orifices large, broad-triangular. Rostrum short, reaching the intermediate coxæ. Hind tarsi short; basal joint longer than the two following together and moderately expanded; the second very short, lying within the oblique apex of the first; third short, terete.

This genus is aberrant wherever it may be placed and seems in a way to connect the Capsinæ with the Bryocorinæ.

Type: *Camptobrochis phorodendronæ* Van D.

*Psallus albatu*s n. sp.

Aspect of *Plagiognathus spilotus* Fieb. Whitish; clypeus, basal joint of the antennæ, vitta on either side of the pronotum, clavus within, two subapical marks on the corium and two on the membrane piceous or black. Length 4 mm.

Head moderately produced, almost vertical. Vertex nearly as broad as long, convex, polished, without a basal carina. Clypeus prominent, its base a little above the line connecting the base of the antennæ, not separated from the vertex by a distinct impressed line. Eyes minutely granulated, reaching well below the middle of the sides of the head; angle of the face much less than a right angle. Antennæ inserted close to the eyes and a little above their lower angle; basal joint scarcely surpassing the clypeus. Pronotum about as in genus *Plagiognathus*, about one-half broader than long; anterior margin straight, posterior feebly concavely arcuated; callosities large, contiguous. Basal lobe of the scutellum a little exposed. Elytra somewhat longer than the abdomen, subparallel, a little wider behind, the costa very feebly arcuated. Oviduct of female reaching well toward the base of the venter.

Color a soiled white, more or less tinged with fulvous on the vertex, anterior lobe of the pronotum, scutellum, base of the elytra and the femora, especially in the male. Clypeus and basal joint of the antennæ, its extreme apex excepted, black and polished; sides of the pronotum behind the callosities both above and below, inner half of the clavus, and two elongated spots toward the apex of the corium dull black. Membrane white with the areoles and a spot beyond the cuneus fuscous in the female, the male has these marks much extended leaving only the middle area of the membrane pale; veins pale in both sexes. Base of the pronotum discolored by the black mesonotum beneath. Hind femora with a few black points irregularly placed; tibial spines black but without black points at their base; tarsi infuscated. In the male the abdomen is black and

the sternum broadly black; in the female the pleural pieces and ventral and genital segments are bordered with black and the sternum is narrowly black.

Described from numerous examples beaten from sycamore trees at Hamburg and Gowanda, N. Y., in July and August. Mr. Heidemann has sent me the manuscript name of *Plagiognathus albatus* Uhler for this species but the description seems never to have been published. This insect varies much in the extent of the dark markings and in some they coalesce and are so extended as to give the insect a strong resemblance to *Plagiognathus obscurus*, but the long female oviduct, the unspotted tibiæ and irregularly dotted femora will distinguish it from that species and genus.

Psallus vaccini n. sp.

Allied to *absinthii* Scott. Smaller and paler than *juniperi* Heid. Oblong; white; minutely white pubescent; irrorate with minute fuscous points which omit the nervures. Length $3\frac{1}{2}$ mm.

Head a little oblique; as seen from before longer and more pointed than in the allied species; viewed from the side produced beyond the eye for about the width of the eye. Clypeus small, distinct, the basal suture obvious but not conspicuous, scarcely attaining the line of the antennæ. Eyes oval, nearly vertical, strongly granulated, reaching well down toward the gula. Antennæ long, basal joint but little surpassing the clypeus; third but little shorter than the second; fourth short and setaceous, little longer than the basal. Pronotum short, scarcely longer than the head; anterior margin feebly sinuated; base and sides straight, the latter strongly oblique. Scutellum small, equilateral. Elytra long, parallel, about two times the length of the abdomen. Hind femora rather broad and flattened.

Color whitish tinged with testaceous on the head, callosities and scutellum; the pronotum, scutellum and elytra dotted with fuscous, these dots fewer on the disk of the elytra anteriorly and on the base of the cuneus, sometimes wanting on the disk of the pronotum where there may be a dusky cloud from the dark mesonotum showing through. Elytral commissure with a brown line beyond the tip of

the clavus. The brown dots are segregated on the apex of the cuneus and to a less extent on the apical one-fourth of the corium. Membrane milky with white veins and four marginal brown marks, the two nearest the apex larger. Antennæ pale testaceous, the basal joint white with a black dot within; second obscurely dotted with brown. Femora with brown irrorations toward their apex which are more conspicuous on the hind pair; tibiæ pointed with black. Beneath more testaceous or a little infuscated.

Described from six male and two female examples. The latter are brachypterous, oval in outline, with the membrane abbreviated, scarcely exceeding the corium and not attaining the apex of the abdomen. When fresh this insect is covered with white scale-like hairs which are soon lost leaving the surface polished. These short females have somewhat the aspect of genus *Chlamydatus* but the produced head at once distinguishes them. I swept these insects from a field of low cranberries near the seashore at Ipswich, Mass., July 22, 1909.

Dr. Poppius has recently established a genus *Pseudatomoscelis* for *Atomoscelis seriatus* Reut. and one new species from Texas. I am, however, unable to find any good characters by which to distinguish this genus from *Psallus* and for the present prefer to unite them. Of genus *Atomoscelis* Reut. I know of but one North American species which was recently described by me from California as *Tuponia modesta*.

Uhler's *Atomoscelis pilosulus* is, I believe a *Psallus*. I have a closely allied form which may be but a color variety. I give below a description of this form.

Psallus cuneotinctus n. sp.

Aspect of *diminutus* Kirschb. but smaller. Evidently closely allied to *Atomoscelis pilosulus* Uhler. Whitish, cuneus rosy and sometimes the white upper surface tinged with red. Length $3\frac{1}{2}$ mm.

Head shorter than usual in this genus, abruptly pointed before, nearly vertical; vertex strongly convex in both diameters, polished, its base smooth, without a carina. Clypeus but slightly prominent, its base but poorly distinguished from the front. Viewed from the

side the head is a little longer than in *Atomoscelis* but distinctly shorter than in *Psallus juniperi* and its allies, moderately oblique, the facial angle distinctly less than a right angle. Eyes small, vertical, reaching below the middle of the sides of the head. Antennæ inserted close to the lower angle of the eye; first joint a little surpassing the clypeus. Pronotum short, transverse, its anterior margin sinuated; callosities distinct, coalescing anteriorly. Elytra parallel, the cuneus attaining the tip of the abdomen.

Color whitish, sometimes uniformly and quite strongly tinged with sanguinous above, the cuneus bright red; head and sometimes the pronotum and scutellum more or less fulvo-testaceous, in this case the callosities greenish. Basal joint of the antennæ black with its extreme apex white, remaining joints soiled white; knees with a distinct black point, the hind tibiæ conspicuously dotted with black. Membrane faintly fuliginous with concentrically iridescent zones and marked with a marginal fuscous spot beyond the cuneus and two smaller ones on the tips of the areoles; nervures white.

Described from sixteen examples taken by Prof. J. C. Bradley at Sisson, Calif., in August, 1908. This species is evidently congeneric with *Atomoscelis pilosulus* but Dr. Uhler does not mention the bright rosy cuneus and I am convinced that the present form will at least have a good standing as a variety if, on comparison, it does not prove to be a distinct species. The more pointed face and less obvious incisure at the base of the clypeus as well as the general facies remove this form from *Atomoscelis*. It differs from *Psallus* by the shorter head and more convex and polished vertex but is best placed here for the present.

Catonia bicinctura n. sp.

Most nearly related to *picta* but darker in color with the facial bands narrower. Length 5 mm.

Head longer than in our other species. Vertex distinctly longer than in *picta* and narrowed anteriorly; apical margin sub-angularly rounded. Front a little narrower, more contracted at base with the sides a little more arcuated.

Color. Female: fuscous-brown; vertex, pronotum, middle of the anterior margin and apex of the mesonotum paler; middle of the face a shade darker than the base and clypeus, this darker shade bounded by a straight clean-cut whitish band between the antennæ, and a feebly curved one on the base of the clypeus; these bands about one-half the width of those seen in *picta*, the lower band is carried across the propleuræ as a slender oblique white line; marginal carinæ obscurely dotted. Pronotum with about four short longitudinal pale carinæ behind the eyes. Mesonotum immaculate except for the paler apex and anterior margin. Elytra slightly paler toward the costa, nervures obscurely pale, dotted with black, the costal stout, white, maculated with fuscous, apical margin with a series of oblong fuscous spots, that on the stigma larger. Legs testaceous, lined with fuscous, the knees with a whitish point. Abdomen sanguineous or nearly so, becoming paler at apex.

The male is darker in color with the elytral points less conspicuous, the frontal bands fulvous tinged with saffron, the abdomen rufous-brown, and the legs darker with two narrow pale bands on the anterior and intermediate tibiæ, which are but indicated in the female.

Described from three examples taken in Florida by Mr. W. T. Davis; one pair at Punta Gorda, on November 12, 1911, and a female from Newberry taken on November 19, 1911.

Catonia producta n. sp.

Allied to *majusculus* Van D. but smaller and with a longer head. Yellowish varied with darker, mesonotum fulvous, front pale, unicolorous. Length $5\frac{1}{2}$ mm.

Head small, shaped about as in genus *Elidiptera*. Vertex narrow, horizontal, produced for about one-half its length before the eyes, somewhat narrowed to the rounded apex, the margins carinately elevated as in *Elidiptera*; its base sub-angularly excavated. Front narrow, strongly tri-carinate, much narrowed to the base which is scarcely one-half as wide as the apex. Pronotum a little longer than in *majusculus*, broadly, angularly, but not deeply excavated at base, forming a rounded flap behind the eye as is usual in this genus.

Color pale yellowish-testaceous, more or less tinged with fulvous, the mesonotum deep rufo-fulvous; face paler with the carinæ whitish. Vertex and disk of the mesonotum more or less infuscated. Elytra darker fulvo-testaceous; clavus exterior to the outer nervure and an oblique costal spot reaching at least to the middle of the disk more or less distinctly whitish, the outer claval nervure conspicuously white and the surface enclosed by it of a rich brown; stigma, a series of lines along the apical margin and sometimes the commissural nervure on about its apical one-half blackish; apex of the elytra beyond the stigma smoky subhyaline, the large costal areole beyond the stigma yellowish and followed by a fuscous cloud, the apical and at least two of the subapical transverse nervures thick and white; the nervures mostly strong and conspicuous.

Described from two female examples taken about the base of redwood trees in Muir woods, Marin County, Calif., September 5, 1914. This species agrees with *majusculus* in having a much longer pronotum than is usual in *Catonia*, with the hind margin less deeply excavated. In the form of its head it approaches *Elidiptera* but differs in wanting the longitudinal compartment behind the eyes.