

UNIVERSITY OF CALIFORNIA PUBLICATIONS
TECHNICAL BULLETINS
COLLEGE OF AGRICULTURE, AGRICULTURAL EXPERIMENT STATION
ENTOMOLOGY

Vol. 1, No. 4, pp. 217-227

March 3, 1916

NEW OR LITTLE KNOWN GENERA AND
SPECIES OF ORTHOTYLINI
(HEMIPTERA)

BY

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***Hyalochloria bella* n. sp.**

Larger than *Orthotylus compsus* Reut. from Jamaica; fulvo-testaceous, elytra white, beautifully varied with clear green blotches. Length 3.5 mm. to tip of membrane.

Head small, vertical. Vertex broad and with base of front much flattened and depressed between the prominent eyes; apex of front convex; clypeus narrow and prominent. Eyes rather large; viewed from the side ovate, reaching two-thirds of the way to gula. Antennae inserted near to and a little above inner angle of the eye; first joint not so long as head, second more than three times longer. Rostrum long, reaching well over base of venter. Elytra ample, costa expanded for the first one-fourth of its length, beyond that subparallel. Bristles of hind tibiae pale and very minute.

Color fulvo-testaceous. Pronotum in fully matured examples yellowish, with about six green blotches on posterior lobe. Scutellum sometimes varied with green. Elytra whitish hyaline, clavus, corium, cuneus and membranal areoles quite regularly blotched with irregular squarish pale green spots. In *compsus* the green is more irregularly distributed and on the membrane is confined to the small areole and the apical half of the larger one. In *bella* there is a series of green points along the costa which is wanting in *compsus*, and, as mentioned above, the size is considerably larger.

Both of these species are intermediate between *Hyalochloria* and *Diaphnidia*, but the short head and excavated vertex would seem to place them nearer to the former, although the elytra are less expanded, with the embolium much less complete.

Described from one male and four female examples taken by me at Alpine, San Diego County, California, in June and July, 1913. It is worth noting here that Mrs. Slosson has taken *Hyalochloria caviceps* Reut. at Biscayne Bay, Florida, thus bringing the typical form of the genus within our territory.

Genus **Labopidea** Uhler

Form oblong in the male, ovate with abbreviated elytra in the female. Color green, sometimes marked with black, and rather densely clothed with pale appressed hairs. Head broad, vertical, with eyes wider than anterior margin of pronotum. Vertex broad, at least three times as wide as eyes, triangularly depressed, this depression really formed by two oblique, impressed vittae, behind which the surface is lower but leaving the hind margin convex and almost carinated across the middle. Front broad and convex in both diameters. Clypeus broad and prominent, its base almost attaining the line of the eyes, sharply distinguished from the front. Antennae rather long, inserted near lower angle of eyes; first joint short, second at least three times longer, third and fourth becoming thinner. Eyes small, prominent, surpassing by nearly their whole width the pronotal angles; viewed from the side short-oval, scarcely reaching to the middle of the side of the head. Pronotum transverse, rather convex, its length about half the basal width, sides strongly oblique, straight, anterior angles well rounded; hind margin depressed, nearly covering basal lobe of scutellum. Elytra well developed in the male; short, with costa strongly arcuated in the female, in which the membrane is frequently reduced to a mere margin. Membrane when developed biareolate. Rostrum scarcely attaining the hind coxae. Arolia free and converging. Wing-cell without a hamus.

Dr. Uhler describes the eyes as almost pedunculate, but that appearance is caused by their rounded, bead-like form when viewed from above, and perhaps in part by the rounded anterior angles of the pronotum. The genus was founded upon a female very like the female of *sericatus*, but somewhat marked with black. The large thick green bodies clothed with a close hoary pubescence, the thick vertical head and the short rounded elytra

of the females will distinguish this genus from *Orthotylus* and its allies. Our species may be distinguished as follows:

Antennae black	1
Antennae pale	2
1. Legs pale, the body beneath mostly pale.....	2. simplex Uhl.
— Legs black, the body beneath mostly black	1. nigripes Reut.
2. Tibial spines slender, pale	3. sericata Uhl.
— Tibial spines stouter, black	4. atriseta n. sp.

1. *Labopidea nigripes* (Reut.)

A large, stout, bluish-green species with minute pale pubescence, and antennae, legs and all beneath black. Male nearly the form of *Ilnacora malina* Uhl., elytra about parallel, with apex of corium almost attaining tip of abdomen; female broad-ovate, widest at base of membrane, tip of membrane scarcely if at all surpassing abdomen. Length 5.5 mm. to tip of membrane.

Head large; vertex broad, nearly four times as wide as the small eyes, hind margin arcuate and somewhat thickened or subcarinate, transverse depression appearing foveate. Front prominent, convex, scarcely polished. Antennae rather long; first joint scarcely as long as head; third two-thirds length of second; fourth short, about one-third length of third. Pronotum short, transverse; callosities small, prominent and distant. Hairs on antennae and legs pale and inconspicuous.

Dextral hook of male genitalia ovate at base, incurved apex narrower but obtuse; sinistral hook broad, convex basally, produced distally, with an acute hook at either angle.

Color uniform bluish-green above, becoming yellowish on vertex and front of pronotum; marked with black as follows: eyes, antennae, a large round spot on front reaching to antennal sockets, tylus, legs, sternum, membrane and abdomen, or at least a broad, median vitta on tergum and venter. Callosities sometimes black.

The type was from Ormsby County, Nevada, and I took a small series at Fallen Leaf Lake, California, in July, at an altitude of 6300 feet. Dr. J. C. Bradley has sent me two females that he took at Roger's Pass in the Selkirk Mountains, British Columbia, in July, 1908. These differ from the type form in having a darker vestiture and in having a black mark covering the callosities and most of the front of the pronotum and a black dot on either side of the base of the vertex.

2. *Labopidea simplex* (Uhler)

Similar to preceding in size and form, but the elytral membrane is more developed in all the females I have seen. Like *nigripes*, it has a bluish-green color above, with pale pubescence and black antennae, but here the legs and lower surface are mostly pale. Length 5 to 5.5 mm. to tip of membrane.

Basal depression of vertex large but sometimes obscure, with hind margin quite distinctly carinate. Callosities small, prominent.

Dextral genital hook of male enlarged into a nearly circular hirsute plate; sinistral broad as in *nigripes*, but obtusely produced exteriorly and acutely hooked at its inner angle.

Color dull bluish-green, becoming yellowish on pronotum anteriorly, on head, legs, and beneath. Frontal black spot obsolete, or indicated by a broad brown arc on either side; clypeus black, at least at base. Antennae black, middle of second joint more or less distinctly brown; callosities generally with black arc bounding them behind. Basal suture of scutellum blackish. Elytra with costal border and cuneus paler, membrane quite uniformly smoky. Tarsi fuscous or black. Pale pubescence longer and denser than in *nigripes*.

The types were from Colorado. I took both sexes at Boulder in that state, July, 1903, and the Academy of Natural Sciences of Philadelphia possesses a series from Alamogordo, New Mexico, taken in April and May, 1902. As nearly as I can judge from Reuter's description, his *Hyoidea grisea* seems to be a straight synonym of this species.

3. *Labopidea sericata* Uhler

Size and form nearly of *nigripes*, male with very long elytra. Color whitish-green, with disk of pronotum and elytra strongly tinged with bluish-green; upper surface densely clothed with long white pubescence intermixed with deciduous silvery scale-like hairs. Length, female 4.5 mm.; male 7 mm., to tip of elytra.

Head proportionately longer and more pointed than in *simplex*. Base of vertex distinctly carinate in male, scarcely so in female, in which the transverse depression is much reduced. First antennal joint short, scarcely as long as dorsal aspect of the head; second about as long as hind margin of pronotum; third two-thirds length of second; fourth about half length of third. Pronotum short, in male strongly narrowed anteriorly; callosities large, oval, prominent. Elytra in male very long, apex of corium a little surpassing tip of abdomen; membrane long, whitish-hyaline, scarcely infuscated; nervures green; in female shorter

than abdomen, with membrane reduced to a mere border to apex of corium. Legs short, tibiae and some minute dots on apex of femora green.

Dextral hook of male genitalia small, nearly circular at apex; sinistral subtriangular, its inner angle produced in a short tooth, the outer prolonged in an incurved subacute horn.

Color pale bluish-green, becoming yellowish on head, pronotum before, and on lower surface. Antennae pale, scarcely darker at apex. Sides of pectus and abdomen more or less greenish, perhaps wholly green in life. Tibiae pale, with minute pale hairs and a few longer brownish bristles. Elytral costa paler; membrane whitish, with a very faint apical clouding, nervures green.

The types of this species were from Colorado, and I found it common at Denver, Boulder, Ward, and Sunset, Colorado, in July, 1903. The female has been determined for me as *Labopidea chloriza* Uhler, but it wants the black markings mentioned in Uhler's description, and for the present I prefer to consider *chloriza* as a species unknown to me.

***Labopidea atriseta* n. sp.**

Closely allied to *sericata* Uhler, but distinguishable by having infuscated antennae, and tibiae armed with conspicuous black bristles set on black dots, while in *sericata* these bristles are weaker and fewer and are not inserted in black points. Color as in the preceding form. Length 5 mm. to tip of membrane.

Head as in *sericata*, vertex feebly carinate at base; front convex, clypeus prominent. Antennae a little longer than in allied species; second joint about three times as long as basal; third, three-fourths the length of second, the fourth short. Rostrum a little shorter than in *sericata*, scarcely attaining apex of intermediate coxae. Elytra with membrane developed in all my specimens, apex of cuneus attaining tip of abdomen.

Color a soiled whitish, more or less tinged with dull green below; disk of pronotum and scutellum and the elytra dull bluish-green, costal margin broadly pale; cuneus pale except its inner angle. Membrane obviously infuscated, with a deeper shade outwardly beyond the areoles. Antennae infuscated, basal joint pale. Hind femora distinctly dotted with greenish-brown exteriorly, tibiae armed with stout black bristles much longer than the width of the joint, each springing from a black point. Tarsi and tip of rostrum black.

Described from four females taken by me at Alpine, Mussey's, and Sweetwater Valley, San Diego County, California, in April and June.

Genus **Macrotyloides**, n. gen.

Elongate, ovate, widest near apex of clavus. Head strongly produced, subhorizontal, with eyes as wide as pronotum at transverse incisure and a little more than half its basal width, its length about equal to the median length of pronotum. Vertex sometimes flattened or impressed before the base, leaving the edge obtusely prominent, but scarcely carinate as in *Orthotylus*. Vertex and front together when viewed from above scarcely longer than wide, but slightly convex. Clypeus prominent, arcuated before, its base well distinguished from the front and on a line with the antennal sockets. Inner cheeks prominent, the outer narrow. Eyes rather small, their inner margins feebly divergent; viewed from the side oval, a little oblique, reaching over half-way to gula; gula nearly horizontal. Antennae long, inserted close to lower angle of eyes, first joint with two setae within near their apex. Rostrum long, attaining middle of venter. Pronotum trapezoidal, its anterior margin about half the posterior; sides rectilinear, obviously carinated; callosities large, little elevated. Basal lobe of scutellum exposed. Prosternal xyphus with margins carinate. Elytra rather short, with costa quite strongly arcuated. Wing-cell without a hamus. Legs rather long; tibiae with short, feeble bristles. Hind tarsi linear, joints but slightly distinguished, basal shorter than the other two, which are subequal; claws short, arolia rather large, free and connivent, not equalling the claws. Vestiture not very dense, of soft white hairs sometimes intermixed with stiffer fuscous ones.

Type of the genus *Macrotylus vestitus* Uhler.

This genus includes rather large green Capsids suggesting *Labopidea* Uhler, but with smaller eyes and a produced oblique head as in *Macrotylus*; the tylus prominent and the claws large, with their arolia free and approaching at apex. When the elytra are closed the body is conspicuously narrowed both before and behind. Our species may be distinguished as follows:

Membrane about equally and lightly infuscated.....**vestitus** Uhl.
 Membrane with the apex abruptly fuscous**apicalis** n. sp.

Macrotyloides vestitus (Uhler)

Long ovate, narrower before; pale grass-green, becoming yellowish when dry; membrane very faintly and uniformly en-fumed. Length 5 to 6 mm.

Head nearly horizontal. Vertex hardly flattened, more than twice as wide as the eyes in the male, its basal margin appearing a little thickened in some individuals; front, feebly convex

obscurely transversely striate. Basal joint of antennae surpassing tip of clypeus by nearly half its length; second slender, about four times the length of first; third and fourth together nearly as long as second, fourth about equal to first. Rostrum reaching on the third ventral segment in the female, to the fifth in the male, first joint surpassing base of head. Pronotum nearly flat and horizontal, the surface before callosities scarcely depressed, anterior edge with a slight median sinus; sides straight, subcarinate. Scutellum equilateral. Elytra elliptical, nearly flat, cuneus scarcely longer than broad; abdomen reaching to middle of cuneus in the male, nearly to apex of membrane in the female. Membrane surpassing cuneus by about one-third its length.

Male genital pieces large; dextral hook very large and curved in conformity with the margin of anal opening, in form ligulate, its subacute tip reaching over onto apex of tergum; sinistral almost equally long and similar in form, produced either way and lying parallel with and just below the dextral, its inner end obtuse, the outer acute. Female pygofer short, beginning behind middle of venter, hind edge of fourth segment almost straight across.

Color pale green, becoming yellowish on head, pronotum, legs, antennae, and lower surface in dried specimens. Antennae infuscated toward apex. Tibial bristles fuscous; apex of tarsi black. Vestiture composed of a fine soft pubescence and short stiff fuscous hairs intermixed. Membrane nearly hyaline, nervures green.

Redescribed from five male and three female examples taken in San Diego County, California, at Alpine, Mussey's, and Foster's, from April to June.

***Macrotylodes apicalis* n. sp.**

Closely allied to the preceding; a little shorter behind, with apex of membrane deep smoky brown. Length 5.5 to 6 mm. to tip of the membrane.

This species is very close to the preceding in most of its characters, but the elytra are shorter, making the insect appear broader; tibial bristles shorter and more slender, and the basal joint of the rostrum scarcely passes the base of the head. Oviduct of the female longer, beginning distinctly before middle of venter, with fourth ventral segment strongly oblique, not practically transverse as in *vestitus*. Color light green, becoming yellowish on head, pronotum, and below, as in *vestitus*. Antennae infuscated at apex. Membrane whitish-hyaline with its apex beyond the tip of cuneus abruptly blackish-fuscous.

Described from six females from southern California. I took it at Alpine, San Diego County, in June, and Mr. Fordyce Grinnell has sent me specimens taken at Pasadena, June, Los Angeles, September, and from the Santa Rosa Mountains.

Pseudopsallus n. gen.

Aspect of *Plagiognathus* nearly, but having cell of wing without a hamus and arolia free and connivent. Body clothed with long black hairs and short, appressed, silvery scale-like hairs or tomentum, which soon wear off, leaving the insect smooth.

Head broad and short, vertical. Vertex with an oblique impression either side, leaving the base prominent but hardly carinate. Front moderately convex, perpendicular or nearly so. Clypeus broad, somewhat prominent, but little compressed; base well distinguished from the front; apex of head blunt, produced below the eye for less than length of the eye. Eyes large, prominent, viewed from the side ovate, reaching below middle of side of head. Antennae inserted near lower angle of eye, short, stout; basal joint not longer than head viewed from above, second scarcely thinner at base than first. Pronotum transverse, smooth, anterior margin about half the length of the posterior, sides ecarinate, nearly straight, anterior angles broadly rounded. Callosities large, little elevated. Basal lobe of scutellum covered. Elytra broad, costal margin considerably arcuated in the female, nearly parallel in the male. Rostrum reaching onto base of venter; oviduct of the female long, beginning before middle of venter. Wing-cell without a hamus. Legs thick, irregularly dotted, tibial spines stout, black. Tarsal claws small but longer than in *Macrotylus*; arolia free and connivent.

Type of the genus *Macrotylus angularis* Uhler.

The type species has much the aspect of a large *Plagiognathus*, but the absence of a hamus in the wing-cell and the free connivent arolia places it in the *Orthotylini*, where there is no established genus that will receive it.

Pseudopsallus angularis (Uhler)

This species and the next are broad forms, and have little in common with the other genera of the *Orthotylini*, but they must be placed in that tribe. *Angularis* is a slaty-brown species with the claval suture, costa, the two principal nervures of the corium, and the membranal nervures whitish, sometimes tinged with yellow on the costa. The region of the callosities is black varied with white, and the head is white, with the oblique impressions

of the vertex, a large arc on either side of the front, some marks on the base and sides of the clypeus and the lorae black. The antennae are black, the second joint as long as the base of the pronotum and one-fourth longer than the third and fourth taken together. The legs are white, with the tibiae dotted with black. The white markings, especially on the head and pronotum may become more or less orange.

Dextral hook of the male genitalia apparently a flattened truncated scale scarcely longer than broad; sinistral very large, expanded on the right to base of dextral hook and exteriorly narrowed and curved upward and inward to superior aspect of anal opening.

I took three examples of this insect from the white sage growing on the mesa at East San Diego, California, during April and May, 1913.

***Pseudopsallus verticalis* (Uhler)**

This is a smaller, pale brown or testaceous form, with the head and anterior lobe of the pronotum fuscous, the base of the vertex marked with pale, and the legs pale dotted with fuscous. The types were from California. I possess one female taken by Mr. Fordyce Grinnell at Pasadena, May 25, 1909, and another taken in Colorado was sent to me by Professor Baker labelled *Macrotylus verticalis* Uhl. MS. It probably was by an oversight that Dr. Uhler failed to mention the Colorado locality in connection with his description.

***Argyrocoris femoratus* n. sp.**

Smaller and darker-colored than *scurrilis*; slender; testaceous-grey, more or less infuscated, cuneus dotted with red. Length 4 mm. to tip of membrane.

Head strongly oblique; vertex convex, ecarinate; front moderately convex. Eyes large oval, viewed from the side oblique and attaining gula, coarsely granulated. Antennae long; basal joint surpassing head by one-half its length; second over three times the length of first; third and fourth together about equal to second. Pronotum transverse, its length about three-fifths its basal width, anterior margin about two-thirds of posterior; hind edge depressed, covering basal lobe of scutellum. Rostrum long, reaching middle of venter. Elytra long and narrow; tip of abdomen not attaining apex of corium, cuneus slender, its length nearly three times its basal width in the male. In the female the abdomen reaches to about the middle of the cuneus, which is

broader and shorter than in the male. Hind femora long and much flattened.

Male genitalia small; dextral hook about twice longer than its basal width and tapering to a point; sinistral oval and lying along the sinistral notch.

Color greyish-testaceous; callosities narrowly black; disk of pronotum with two broad fuscous rays more or less distinct. Scutellum infuscated or almost black. Elytra dotted with sanguinous on cuneus and sometimes more sparsely on corium and clavus. Membrane deeply infuscated, nervures pale dotted with red. Wings somewhat infuscated, with blackish nervures. Body beneath infuscated. Antennae and legs pale, femora dusky, hind pair more or less dotted with red points; tarsi black at apex. Antennae slightly infuscated toward their apex. Upper surface clothed with minute silvery pubescence, obscurely arranged in lines which are more distinct on the head, where they form three longitudinal vittae.

Described from numerous examples beaten from chaparral in San Diego County, California, at Coronado, National City, Alpine, etc., in May and June.

At first sight this species seems very different from *scurrilis*, but a closer inspection shows that it possesses similar generic characters and there can be no doubt that it should be placed in the same genus.

Parthenicus picicollis n. sp.

Allied to *psalliodes*, but with pronotum, scutellum and commissure piceous or almost black; beneath more or less infuscated, above pale, more or less closely dotted with sanguinous points, elytra appearing dark red; membrane black. Length 3 mm. to tip of membrane.

Head vertical; vertex and front conjointly flattened above, a very little convex below, base of vertex ecarinate. Clypeus prominent, but somewhat less so than in *Macrotylus*, its base well distinguished and distinctly above line of antennae. Eyes large, prominent, projecting for nearly their whole width beyond the pronotal angles; viewed from the side broad-oval, vertical, reaching almost to gula, face but little prominent before the eyes, almost half of this being projection of clypeus. Antennae rather short, first joint but little surpassing clypeus; second longer than basal margin of pronotum. Pronotum moderately convex, callosities small and little elevated, distinguished behind by a deeply incised line. Basal lobe of scutellum covered. Costal margin of elytra feebly arcuated. Cuneus about as long as wide at base in

the female, longer in the male. Hind femora about one-third as wide as long in the female, hardly one-fourth in the male.

Dextral hook of the male genitalia slender toward its apex, bent at a right angle dorsally; sinistral somewhat crescentic, its inner (dextral) angle produced.

Ground color pale yellowish-testaceous. Head, legs, and elytra dotted with dark sanguinous, the latter closely, almost confluent so, appearing as if washed with red. Antennae pale, basal joint red, apex slightly infuscated. Pronotum and scutellum deep piceous or almost black; elytral commissure evenly and indefinitely clouded with fuscous, this clouding scarcely extending onto inner angle of corium. Membrane blackish, with a pale line around apex of cuneus, nervures red. Face sometimes dusky, clypeus and cheeks clear red. Lower surface and base of hind femora more or less infuscated; tibial bristles fuscous, springing from sanguinous dots. Upper surface clothed with a fine pale pubescence.

Described from fifteen examples beaten from *Adenostoma* in San Diego County, California, from July to October. Although closely allied to *psalliodes*, this form seems sufficiently distinct by its dark pronotum, scutellum and lower surface, and the concolorous inner angle of the corium.

Transmitted January 3, 1916.