DESCRIPTIONS OF A NEW GENUS AND ELEVEN NEW SPECIES 
of North American Miridae (Hemiptera).* 

By Harry H. Knight, 
Ames, Iowa. 

Psallus tintippennis new species. 

Distinguished by the long rostrum, testaceous color with black calli, roseate red on cuneus and more or less on basal half of corium. 

♂. Length 3.3 mm., width 1.3 mm. Head: width .74 mm., vertex .23 mm.; fulvous, with pale fuscous dots at base of hairs. Rostrum, length 1.12 mm., attaining posterior margins of hind coxae. Antennae: segment I, length .20 mm.; II, 1.03 mm., nearly equal in thickness to segment I; III, shriveled; pale yellowish, pale pubescent, two or three hairs on segment I with obscure pale fuscous at base of each. Pronotum: length .48 mm., width at base 1.08 mm. Pale whitish translucent, head yellowish to fulvous, pronotum and scutellum tinged with dull yellowish: dorsal surface, including head, embolium and cuneus, rather uniformly and finely dotted with pale fuscous, a dot tending to form about the base of

♀. Length 3.2 mm., width 1.3 mm.; very similar to the male in coloration and pubescence. 

Holotype: ♂, August 5, 1924, Santa Catalina Mts., alt. 3000 ft., Arizona (A. A. Nichol); author’s collection. 

Allotype: same data as the type. 

Paratypes: ♂, taken with types. ♂ 3♀ August 29, 1924, Santa Rita Mts., alt. 4500 ft., Arizona (A. A. Nichol). 

Psallus maculosus new species. 

Allied to aspersus V. D., but differs in the unsotted membrane, and in the more uniformly dotted dorsal surface including the head. 

♂. Length 3.3 mm., width 1.3 mm. Head: width .74 mm., vertex .23 mm.; fulvous, with pale fuscous dots at base of hairs. Rostrum, length 1.12 mm., attaining posterior margins of hind coxae. Antennae: segment I, length .20 mm.; II, 1.03 mm., nearly equal in thickness to segment I; III, shriveled; pale yellowish, pale pubescent, two or three hairs on segment I with obscure pale fuscous at base of each. Pronotum: length .48 mm., width at base 1.08 mm. Pale whitish translucent, head yellowish to fulvous, pronotum and scutellum tinged with dull yellowish: dorsal surface, including head, embolium and cuneus, rather uniformly and finely dotted with pale fuscous, a dot tending to form about the base of

*—Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.
each pubescent hair. Membrane and veins pale, within apex of areoles, and a barely visible arc-shaped cloud beyond areoles, pale fumate. Clothed with pale to yellowish pubescence, without evident sericeous pubescence, a character which indicates this species may not remain in Psallus. Legs pale with a tinge of yellowish, femora with small, chiefly transverse fuscous spots; tibial spines brown to black, each with a blackish spot at base, also with spot on knee; tarsi fuscous on apical segment.

*Holotype:* ♀, March 29, 1924, Tucson, Arizona (A. A. Nichol); author's collection.

*Paratype:* ♀, taken with the type.

**Reuteroscopus longirostris** new species.

Closely related to *ornatus* Reut., but form more slender, head a trifle longer, while the rostrum is distinctly longer, reaching to middle of venter; color greenish yellow, with less fuscous coloration than *ornatus.*

♂. Length 3.2 mm., width 1.2 mm. Head: width .64 mm., vertex .35 mm. Rostrum, length 1.37 mm., reaching upon seventh ventral segment, yellowish, first segment green, apex of last segment black. Antennae: segment I, length .18 mm.; II, .08 mm.; III, .77 mm.; IV, .41 mm.; pale, last two segments pale fuscous. Pronotum: length .48 mm., width at base .68 mm. Head and pronotum green to yellowish, vertex and calli distinctly yellow; scutellum fuscous, apex pale; hemelytra pale greenish yellow, subtranslucent, clavus except outer margin, and inner apical angles of corium fuscous, anal ridge pale. Membrane pale fuscous, larger areole paler, smaller areole dark fuscous, paler bordering apex of cuneus, a rather large pale spot along margin at middle of apical half, similar to that in *ornatus* but larger. Dorsum clothed with prostrate, pale sericeous pubescence, but with small spots and areas nearly glabrous, the whole intermixed with more erect pale fuscous pubescent hairs, being much softer and finer than in *ornatus*, head and anterior half of pronotum with pale pubescence only. Ventral surface green to yellowish, sternum more yellow, venter clothed with pale pubescence. Legs pale, coxae greenish yellow, femora with a few small, pale fuscous points on apical half of anterior face, pubescence dusky; tibial spines black but without spots at base; tarsi dusky, fuscous apically.

♀. Length 3.1 mm., width 1.14 mm.; very similar to the male except membrane paler, smaller areole and a distinct longitudinal mark behind apex of areoles, darker fuscous.

*Holotype:* ♂, July 21, 1917, Santa Cruz river, Tucson, Arizona (H. H. Knight); author's collection.

*Allotype:* taken with the type at light.

*Paratypes:* 2 ♂, taken with types.

**Orthotylus minuendus** new species.

Distinguished by the small size, short rostrum, large eyes, and blue green color.

♂. Length 2.6 mm., width .94 mm. Head: width .67 mm., vertex .16 mm.; width of head nearly equal to seven-eighths of the width of pronotum at base; eyes large, black. Rostrum, length .67 mm., scarcely attaining posterior margin of mesosternum. Antennae: segment I, length .18 mm.; II, .77 mm.;
III, .68 mm.; IV, .25 mm.; uniformly pale yellowish. Pronotum: length .40 mm., width at base .80 mm. Dorsum blue green; membrane uniformly fumate, veins blue green; clothed with minute, prostrate, pale pubescence, and interspersed with longer, more erect, pale soft pubescent hairs. Body beneath pale green, sternum paler. Legs pale yellowish to green, tibiae and spines pale. Genital claspers small but distinctive, left clasper a simple, curved, acuminate hook, right clasper little different although slightly shorter.

♀. Length 2.6 mm., width .95 mm. Head: width .59 mm., vertex .27 mm. Pronotum: length .36 mm., width at base .80 mm. Very similar to the male in form and color, although vertex and mesoscutum yellowish.

_Holotype_: ♀, August 5, 1924, Santa Catalina Mts., alt. 3000 ft., Arizona (A. A. Nichol); author's collection.

_Allotype_: same data as the type.


**Orthotylus mistus** new species.

Shape of head and general color very similar to _coagulatus_ Uhler, but size fully one-third larger; belongs in the _flavosparsus_ group.

♀. Length 5 mm., width 2 mm. Head: width .97 mm., vertex .59 mm. Rostrum, length 1.23 mm., reaching to middle of intermediate coxae. Antennae: segment I, length .40 mm.; II, 1.48 mm.; III, missing; clothed with rather coarse black pubescence. Pronotum: length .74 mm., width at base 1.48 mm. Yellowish green, the hemelytra more blue green; antennae and legs greenish yellow. Dorsum clothed with prostrate, silvery sericose pubescence and intermixed with erect black hairs, being very similar to _coagulatus_ Uhler in this respect. Membrane uniformly pale fuscous, veins green. Venter with simple pale pubescence.

_Holotype_: ♀ July 31, 1921, Nordegg, Alberta (J. McDunnough); No. 1350 in the Canadian National collection.

_Paratype_: ♀ July 10, 1921, Nordegg, Alberta (J. McDunnough); author's collection.

This species runs to _ovatus_ V.D. in Van Duzee's key (Proc. Calif. Acad. Sci. (ser. 4) vi, 1916, p. 89) to the species of _Orthotylus_, but is clearly distinguished therefrom by the shorter rostrum and smaller eyes; the dorsal width of an eye is barely equal to one-third the width of vertex, while in _ovatus_ the eye is equal to one-half the width of vertex. In _mistus_ the length of antennal segment I is only equal to two-thirds the width of vertex.

**Inlacorella** new genus

Arolia erect and converging at apices as in _Inlacora_; closely related to _Inlacora_ but differs in being more elongate and in lacking the black scale-like pubescent spots on pronotum; the dorsum clothed with rather evenly distributed, appressed, scale-like pubescence, and interspersed with a few erect, black bristle-like hairs, these latter most prominent on vertex and anterior margin of pronotum. Head with eyes nearly as in _Inlacora_, the tyulus more prominent; vertex more distinctly flattened, the basal carina transverse and sharply defined; rostrum reaching upon intermediate coxae. Antennae much as in _Inlacora_ although segment I
is distinctly longer in three species here described. Pronotal disk much flattened, lateral margins nearly straight, or only slightly sulcate sinuate, anterior angles rounded, lateral margins sharply angled although not carinate. Legs rather long and slender, more so than in Il-nacora. Hemelytra very long in the male, the tip of the genital segment not reaching the base of cuneus; in the female the tip of venter reaching to near apex of cuneus. General form of the genitalia distinctive of the genus; the right clasper more suggestive of Ilnacora, while the left clasper appears different from any of the closely related genera (fig 1).

Genotype: *Ilnacorella nigrisquamosa* new species.

**Fig. 1.** *Ilnacorella nigrisquamosa* n. sp., male genital segment, posterior aspect showing genital claspers, right clasper raised somewhat above the normal position.

*Ilnacorella nigrisquamosa* new species.

Color dark green, antennae and venter black; dorsum clothed with evenly distributed black scale-like pubescence and interspersed with more erect, black bristle-like hairs; calli moderately convex, not distinctly sulcate along posterior margins.

♂ . Length 5.4 mm., width 1.5 mm. Head: width .88 mm., vertex .47 mm.: green, vertex becoming blackish but median line green, base of tyulus and narrowly surrounding antennal socket blackish; vertex and sides of front with erect, prominent black bristles, basal carina with about eight black bristles, spot on middle of carina and a larger one at each side of vertex next to the eye, glabrous. Ros- trum, length 1.04 mm., reaching upon base of intermediate coxae, green, apex blackish. Antennae: segment I, length .86 mm.; II, 2.14 mm.; III, 1.43 mm.; IV, .58 mm.; dark fuscous to black, dorsal surface of segment I greenish; clothed with black pubescence but more sparsely set than in *Ilnacora malina* Uhler. Pronotum: length .67 mm., width at base 1.2 mm.; lateral margins nearly straight, sharply angled, the edges made more prominent by a slight sulcation bordering the margin; calli only moderately convex, but appearing slightly more elevated than anterior margin of disk, beset with three or four prominent black bristles on disk of each, separated by a slight depression but the posterior margins scarcely delimited from the nearly flat pronotal disk; disk beset with several prominent, black bristle-like hairs, but more thickly covered by the appressed, black scale-like pubescence which likewise covers the scutellum and hemelytra; color dark green, blackish between the calli. Scutellum more flattened than in *Ilnacora malina* Uhler,
green, mesoscutum fuscous at the sides and on middle. Sternum fuscous, pleura
greenish, ostiolar peritreme fuscous. **Hemelytra**: elongate, the base of cuneus
arising at a point slightly beyond tip of venter, embolar margins only very slight-
ly arcuate; uniformly dark green in color; clothed with rather evenly distributed,
appressed, black scale-like pubescence, and interspersed with a few erect, stiff
black hairs; membrane fully developed, uniformly fuscous, areoles as in **Illicora**,
veins pale to greenish. **Legs**: long and slender, hind femora extending slightly
beyond tip of venter or to base of cuneus, uniformly clothed with rather short
black hairs, the tibial spines scarcely more prominent than the black hairs and in
length not exceeding thickness of tibia; green or yellowish green, tarsi, narrowly
at base and apices of tibia, fuscous, apical half of femora obscurely dotted with
minute fuscous points which are not located at base of hairs. Arolia erect, con-
verging at apices as in Illicora, the pseudarolia likewise prominent. **Venter**:
black, a greenish spot each side of genital segment; clothed with pale to dusky
pubescence, the scale-like type not apparent; genital claspers distinctive (fig.).

**Holotype**: ♀ August 1, 1900, Lizard Hill, Colorado (E. D. Ball); author's
collection.

**Illicorea sulcata** new species.

Structurally very similar to **nigrisquamosa** except in form of the pronotum;
also differs in the uniformly green color of head, venter, and legs; color yellowish
green, the hemelytra blue green.

♀. Length 5.8 mm., width 1.8 mm. **Head**: width .90 mm., vertex .46
mm. Rostrum, length 1.11 mm., attaining hind margin of mesosternum, green,
the apex black. **Antennae**: broken. **Pronotum**: length .73 mm., width at base
1.26 mm., lateral margins prominent, almost carinate, distinctly sulcate in outline;
differs from **nigrisquamosa** in that the margins of the calli are strongly sulcate
except outer anterior angles which are continuous with the rounded anterior
angles of pronotal disk; anterior margin of pronotum distinctly arched, fully as
high as disk of each callos, thus lending to the effect of the calli being set in a de-
pression. Dorsum with black scale-like pubescence nearly as in **nigrisquamosa**
but the bristle-like hairs on head and anterior margin of pronotum appear more
prominent. Venter uniformly green; genital claspers nearly as in **nigrisquamosa**,
the two species indicating that the claspers are chiefly generic in character.

♂. Length 5.8 mm., width 1.94 mm. **Head**: width .94 mm., vertex .51
mm. Rostrum, length 1.20 mm., fully attaining posterior margin of mesosternum.
**Antennae**: segment I, length .81 mm., cylindrical; II, 2.26 mm., slender, cylindri-
cal, thickness equal to half the diameter of segment I; II, 1.48 mm.; IV, .60 mm.;
yellowish green, last two segments fuscous, narrow base of segment I black, base
and apex of segment II narrowly fuscous; clothed with short, stiff, black pubes-
cent hairs, more sparsely set than in Illicora, segment I with six or eight erect
black bristles which in length about equal thickness of segment.

**Holotype**: ♀ July 4-11, 1923, Waterton Lakes, Alberta (J. McDunnough).

**Allotype**: taken with the type; author's collection.

**Paratypes**: ♀, 9 ♀, taken with the types; Canadian National collection
and author's collection.
**Inacorella argentata** new species.

Form very similar to *sulcata*, but size smaller, differs from that species as well as *nigrisquamosa* by having the dorsum clothed with closely appressed, silvery white, scale-like pubescence, but intermixed with rather sparsely set, erect bristle-like black hairs; the bristle-like hairs on head and pronotum nearly as in *sulcata*. Color very similar to *sulcata* except vertex, frons, and tylus are distinctly yellow.

♀. Length 4.6 mm., width 1.6 mm. Head: width .93 mm., vertex .48 mm. Rostrum, length 1.08 mm., reaching to middle of intermediate coxae. Antennae: segment I, length .58 mm.; II, 1.71 mm.; III, 1.14 mm.; IV, missing. Pronotum: length .61 mm., width at base 1.08 mm. Membrane of hemelytra uniformly pale fuscous, veins green.

*Holotype*: ♀ June 23, 1924, Gallatin County, Montana (Wm. C. Cook); author's collection.

*Paratypes*: 3 ♀, taken with types; ♀ June 16, 1912, Florence, Montana; Montana Agricultural Experiment Station collection and author's collection.

**Labopidea nigrisetosa** new species.

Somewhat smaller than *simplex* Uhler, and differs in pubescence and color of legs. The black legs are suggestive of *nigripes* Reuter but that species is distinguished by the soft pale pubescence.

Black, vertex, pronotum except calli, and hemelytra olive green to dark green, scutellum greenish to black; clothed with nearly erect, stiff black setose hairs, the heavy black hairs more prominent on vertex and anterior half of pronotal disk. Hemelytra abbreviated, not extending beyond seventh abdominal segment in either sex; area of membrane not equal to that of cuneus.

♂. Length 3.1 mm., width 1.5 mm. Head: width 1.03 mm., vertex .61 mm. Antennae: segment I, length .37 mm.; II, 1.5 mm.; III, missing. Pronotum: length .60 mm., width at base 1.31 mm.

♀. Length 3.5 mm., width 2 mm. Head: width 1.03 mm., vertex .66 mm. Antennae: segment I, length .37 mm.; II, 1.4 mm.; III, missing. Pronotum: length .63 mm., width at base 1.26 mm.


**Irbisia nigripes** new species.

This species runs close to *setosa* V.D. and *solani* Heid. in Van Duzee's key to the species of *Irbisia* (Proc. Calif. Acad. Sci., (ser. 4), xi, 1921, p. 151), but is distinguished by the very prominent and nearly rectangular humeral angles, as well as the uniformly black legs and rostrum.

Pronotal disk more flattened than in *solani*, the lateral margins nearly straight and clothed with prominent erect, pale brownish hairs which extend on the disk but appear more conspicuous along lateral and anterior margins; disk more closely and confluentely punctate than in *solani*. Dorsum clothed with white sericeous pubescence which becomes more or less brownish on scutellum and hem-
elytra, but intermixed on pronotum and head with prominent, erect, pale to brownish hairs. Embolar margins distinctly arcuate; membrane fully developed; apex of cuneus nearly attaining tip of venter. Uniformly black, pleura of pronotum pale below line of coxal cleft; polished as in solani; legs and rostrum without pale indications.

♂. Length 6.2 mm., width 2.7 mm. Head: width .83 mm., vertex .62 mm. Antennae: segment I, .67 mm.; II, 1.80 mm.; III, 1.1 mm.; IV, broken. Pronotum: length 1.14 mm., width at base 2.2 mm., width of anterior angles 1.14 mm.

♀. Length 6 mm., width 2.85 mm. Head: width 1.34 mm., vertex .71 mm. Antennae: segment I, length .63 mm.; II, 1.86 mm.; III, missing. Pronotum: length 1.2 mm., width at base 2.2 mm., width of anterior angles 1.21 mm.

Holotype: ♂ May 31, Troy, Idaho; Cornell University collection. Allotype: topotypic; author's collection.


**Dichrooscytus barberi** new species.

More robust than *suspectus* Reut., and differently colored; greenish yellow, apex of corium, tip of cuneus, small spot each side on margin before apex of scutellum, and veins of membrane, reddish to bright red.

♀. Length 4.4 mm., width 2.3 mm. Head: width 1.2 mm., length .48 mm., vertex .52 mm.; short, strongly vertical. Rostrum, length 2.03 mm., extending slightly beyond posterior margins of hind coxae. Antennae: segment I, length .38 mm.; II, 1.54 mm., slender, gradually thickened from middle toward apex; III, .78 mm.; IV, .31 mm. Pronotum: length .53 mm., width at base 1.91 mm.; finely, obsoletely punctate, basal margin slightly sinuate, being broadly sulcate at middle. Scutellum distinctly convex, transversely rugulose. Hemelytra with embolar margins rather strongly arcuate; cuneus sharply deflected. Clothed with rather short, closely appressed, golden yellow pubescence, more prominent on scutellum and hemelytra. Coloration greenish yellow, more green between and around the calli, rather broadly transversely red across apex of corium, apex of cuneus bright red; scutellum with dark reddish mark each side on margin before apex. Membrane pale yellowish, veins bright red; anal area, within apex of areoles, and irregularly in transverse cloud just beyond areoles, pale fuscous to fuscous. Ventral surface yellowish to greenish, basal half of venter more greenish; legs strongly yellow, tibial spines yellowish to brown.

Holotype: ♀ July 29, 1905, Huachuca Mts., Arizona (H. G. Barber); author's collection.

**Polymerus basivittis pallidulus** new variety.

Suggestive of *unifasciatus* var. *lateralis* Hahn, but more nearly the size of *basalis* Reut., the pale areas frequently with a tinge of red in the hypodermis although the cuneus is never distinctly red as in *lateralis* Hahn.

♂. Length 4.7 mm., width 2.4 mm. Head: width 1.05 mm., vertex .54
mm.; black, vertex with triangular pale spot next to each eye. Rostrum, length 1.7 mm., reaching posterior margins of middle coxae, reddish, becoming blackish apically. Antennae: segment I, length .46 mm.; II, 1.65 mm., pale reddish, more or less blackish at base and apex; III, .74 mm.; IV, .67 mm. Pronotum: length 1.01 mm., width at base 1.01 mm.

Black, more broadly pale than the typical *basivittis* Reut., pronotal disk with basal margin and basal one-third of lateral margins, pale with a tinge of reddish in the hypodermis. Apex, or apical half of scutellum except lateral margins, basal one-third to one-half of corium and frequently extending along radial veins to connect with spot at apex of embolium and corium, embolar margins, tip of clavus and sometimes inner margins, cuneus entirely or with exception of fuscous cloud on central area, pale, usually with a tinge of reddish showing through cuticula from the hypodermis; anal ridge and veins of the membrane pale. Clothed with silvery sericeous pubescence, becoming golden on clavus and margins of scutellum, and to some extent on corium. Tibiae pale to reddish, or with blackish appearing on basal one-third, hind tibiae with white line on dorsal surface extending full length except for blackish at extreme tip; femora becoming pale reddish on anterior face, although a double row of blackish dots persists. Venter black but becoming more or less pale reddish on sides; clothed with pale pubescence and intermixed with some silvery sericeous pubescence, thus differing from *unifasciatus* Fab. which species is clothed with prominent golden sericeous pubescence.

δ. Length 5 mm., width 2.3 mm. Head: width 1.01 mm., vertex .53 mm. Antennae: segment I, length .45 mm.; II, 1.71 mm.; III, .68 mm.; IV, .71 mm. Pronotum: length .93 mm., width at base 1.74 mm. Pale areas of the dorsum nearly as extensive as in the female; venter rarely with pale on the sides.


*Allotype*: same data as type.


Reuter's original description of *basivittis*, based on a female specimen, states that the second antennal segment is equal in length to basal width of pronotum. In the present described variety, antennal segment II is distinctly shorter than width of pronotum at base as indicated by the above measurements. The writer is inclined to believe that Reuter's statement is not based on measurement of the specimens and thus may err in that respect. The type of *basivittis* was collected on Pikes Peak, Colo., (alt. 9000 ft.) and apparently represents a dark variety of the species in which the pronotum is entirely black. A specimen is at hand from Colorado [δ July 18, 1898, Little Beaver (E. D. Ball)] which fits the color
patterns of the typical *basivittis* except that the basal margin of the pronotum is slenderly pale. This near approach to the black form leads me to believe that the insect here described is probably only a color variety of *basivittis* Reut., yet represents the commonest color phase of the species. Variety *pallidulus* is distinguished by having basal margin of pronotum pale.