

ENTOMOLOGICA AMERICANA

VOL. V.

BROOKLYN, SEPTEMBER, 1889.

NO. 9.

Review of the North American Species of *Pediopsis*.

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The family *Bythoscopidae*, to which this genus pertains, is separable from its allies by the position of the ocelli, which are found on the face, more or less remote from its superior margin; the vertex is narrow and confounded with the front, or apparently wanting, the head being entirely deflexed; and the elytra are membranaceous or but slightly thickened. Six northern genera have been established:

Idiocerus Lewis, Trans. Ent. Soc. Lond., I, p. 49, 1834.

Macropsis Lewis, Trans. Ent. Soc. Lond., I, p. 49, 1834.

Omopsis Burm., Genera Ins., I, plate 10, 1846.

Strugania Stål, Rio. Jan. Hemip., II, p. 49, 1861.

Pachyopsis Uhler, Bull. U. S. Geol. and Geog. Surv., III, p. 466, 1877.

Bythoscopus Germ., Silb. Revue, I, 180, 43, 1833.

Pediopsis Burm., Genera Ins., I, plate 10, 1846.

Agallia Curtis, Ent. Mag., I, p. 193, 1833.

Macropsis has not yet been reported from this country; the other genera are well represented here. Mr. Uhler's description of *Pachyopsis* passes without notice several important points, rendering its arrangement in a synoptic table quite impracticable without an example for direct comparison, which unfortunately I do not possess; but its position would seem to be near *Macropsis*. For the determination of the other five genera the synoptic scheme used by Mr. Edwards in his *Synopsis of the British Cicadinae* will probably be found as convenient as any yet published. To make it more accessible to our American collectors it is copied here: *

* Since the above was written Mr. Ashmead has published a generic synopsis of the *Bythoscopidae* practically the same as that of Mr. Edwards except that he includes *Pachyopsis* of Uhler, placing it near *Idiocerus*. See Ent. Am., V, p. 125, July 1889.

- 1 (6) Antennæ inserted in a deep cavity beneath a ledge.
- 2 (5) Striation of the pronotum transverse.
- 3 (4) Side margins of the pronotum sharply keeled, of moderate length. *Macropsis*
- 4 (3) Side margins of the pronotum not sharply keeled, very short, . . . *Bythoscopus*
- 5 (2) Striation of the pronotum running obliquely from the middle of its front margin to its hinder angles. *Pediopsis*
- 6 (1) Antennæ inserted in a feeble cavity, their base free.
- 7 (8) Head with the eyes wider than the elytra at the base, membrane with an appendix. *Idiocerus*
- 8 (7) Head with the eyes as wide as the elytra at the base, no appendix to the membrane. *Agallia*

In some of the genera the marginal nerve of the wing is continued around the apex and joins the first radial near its middle, thus forming an exterior apical cell, called by Fieber the "supernumerary cell." This cell is present in *Macropsis*, *Idiocerus* and *Agallia*, and absent in *Bythoscopus* and *Pediopsis*. Strangely enough, Fieber, in his *Europäische Bythoscopida*, states the presence of this cell in genus *Bythoscopus* in which it does not exist, and its absence in *Agallia* where it is present. The same error is repeated in his *Cicadines d'Europa*. I have examined a number of European species of each of these genera, received from M. Lethierry, and they agree with the American forms in differing from Fieber's positive statement. But Fieber is not the only one who has erred on this point, for as late as 1884 Mayr, in his *Tabellen*, has reversed these two genera exactly as Fieber did before him. If these later papers are not mere compilations from Fieber's synopsis of 1868 these discrepancies are quite inexplicable to me.

Of the genus *Agallia* two species have thus far been described from this country :

Agallia sanguinolenta.

Bythoscopus sanguinolentus Prov. Naturaliste Canadien, vol. IV, p. 376, 1872.

Bythoscopus siccifolius Uhler, Bull. U. S. Geol. and Geog. Surv., vol. II, p. 359, 1876. Wheeler's Rept. of the Chief of Eng. for 1877, p. 1334. Van Duzee, Can. Ent., vol. XXI, p. 9, 1889 (*Agallia*).

Through the kindness of M. Provancher I have had the pleasure of examining a typical example of his species and have thus been able to compare it directly with Mr. Uhler's description, and find that it agrees in every particular. It is not an uncommon species here on grass and weeds in pastures and roadsides, especially where *Carex* and *Juncus* abound.

* The striation of the pronotum in this genus is not strictly transverse, but toward the anterior margin especially it is quite oblique; thus approaching some forms of *Pediopsis*. Dr. Fitch has described six species under *Athysanus*.

Agallia quadripunctata.

Bythoscopus 4-punctatus Prov. Nat. Can., IV, 376, 1872.

Agallia flaccida Uhl., Van Duzee, Can. Ent., vol. XXI, p. 9, 1889.

This species I have received in exchange from a number of correspondents as *Agallia flaccida* Uhler, and have so used the name myself in exchanging and in the *List of Muskoka Hemiptera*. It seems to have been an early manuscript name of Mr. Uhler. I append a translation of M. Provancher's description, as the periodical in which it occurs seems to be rare and difficult to obtain. For the copy in my possession I am indebted to the kindness of its editor.

“*Bythoscopus 4-punctatus*, 4-pointed *Bythoscopus*, n. sp.

“Length, .12 inch. Of a yellowish brown, more or less obscure. Head varied with yellow and brown, with two black points on the anterior margin. Prothorax with two large black points almost on the posterior margin, in line with those of the head; other less distinct black points sometimes appear in advance of these. Elytra soiled yellow, the nerves paler. Beneath brown, feet yellowish. Common. Very near the preceding (*By. sanguinolentus*) but easily distinguished however by the presence of the two black points on the posterior margin of the prothorax.”

This is a very abundant species in Western New York from early in May until September, and in fact the year round, as it appears to hibernate in the adult state as do many if not all the *Jassidae*.

GENUS *PEDIOPSIS* Burm.

Head entirely or almost entirely deflexed, viewed from above forming a narrow margin to the front of the prothorax; vertex confounded with the front, with the eyes, as wide as the pronotum. Ocelli on the face about opposite the middle of the eyes, from which they are less distant than from each other. A more or less obvious depression crosses the middle of the face a little above the ocelli. Front bounded by a slight depression, not quite reaching the line of the ocelli. A sharp oblique ridge from the outer angle of the eye to near the base of the clypeus, shielding the base of the antenna. Loræ prominent, tumid. Outer cheeks narrow below, where they are largely covered by the loræ. Clypeus oblong or ovate, usually with a lateral depression before the loræ that sometimes extends across the apex. Rostrum short, scarcely attaining the base of the intermediate femora; composed of three joints, the basal hidden beneath the clypeus. Pronotum short and broad, triangular before, sides very short, latero-posterior angles rounded; posterior margin broadly, sometimes angularly, concave. Scutellum broad-triangular, transversely depressed before the apex, which is sub-acute; slightly calloused within the basal angles. Elytra thin or membranaceous, costa more or less arquated, apex rounded, inner margin straight; membrane without an appendix. Ordinarily there are six closed cells on the

corium, one basal, two discal, and three ante-apical. Membrane composed of the five apical areoles. One or more additional nerves sometimes appear on the disk of the corium. Clavus with two simple parallel nerves terminating on the sutural margin. Wings very delicate membranaceous; abdominal area large; costa slightly concave; supernumerary cell wanting; first radial simple; second radial forked before the apex, each of these forks is connected by a delicate transverse nerve to the adjacent radial, forming three apical areoles; the two remaining radials simple; a marginal nerve running near and parallel to the outer edge of the wing connects all these radials and their branches. Tarsi three-jointed, the basal joint of the hind pair almost as long as the second and third united. Abdomen short, laterally compressed, showing seven segments above and six beneath; ventral segments after the first much depressed within the connexivum; fifth, or ventral plate, in the male sub-cylindric, slightly emarginate at the apex; in the female flat, obtusely triangular and distinctly emarginate at the apex. The form of this ventral plate in the female, which in *Bythoscopus* differs in the various species and forms excellent specific characters, in *Pediopsis* is scarcely variable and is of little help in discriminating the species. The characters of the genitalia do not differ materially from those of the family; in the male the valve is wanting, the plates are broad and hooked above, the styles are ligulate, curved upward toward the apex, and fringed within with long hairs.

The striation of the pronotum radiates from a central smooth line obliquely towards the posterior angles. In some species these rugæ are very prominent, in others feeble and broken up into coalescing punctures; the same form of sculpture is found on the upper part of the face, but here it is less distinct; the central smooth line is generally discernable as far as the frontal suture. In the male the clypeus and loræ are widened and somewhat swollen, obscuring the sutures and giving a square appearance to the lower part of the face. Two styles of elytral marking may be noted: unicolorous or obscurely clouded elytra, *viridis*, *basalis* and *punctifrons*; transversely banded or maculated elytra, *trimaculata*, *bifasciata*, *flavescens*, *insignis* and *ferrugineoides*; the latter form does not seem to be represented in Europe, or but feebly in *cerea* etc. *P. viridis* as here defined seems to combine the characters of the European group represented by *virescens*, and that represented by *cerea*, *glandacea*, &c., the former by the ♀ *viridis*, the latter by the ♂; the European *cerea*, &c., exhibit a black dot on the propleura and on the outside of the posterior tibia at their base, the former only of which is present in the American species. *P. punctifrons* is the only American representative known to me of the spotted-faced series that is so largely

represented in England and on the Continent, but it is not unlikely that other examples will yet be added from the Pacific Coast region where the faunal peculiarities resemble those of Europe much more closely than the Atlantic region. As a rule our species are a little larger than the corresponding European forms, and the pronotal striation is less distinct.

I am placed under renewed obligations to Mr. P. R. Uhler for the loan of very valuable material in this genus and in *Bythoscopus* without which the present studies would have been much more imperfect.

The following synoptic key to our described species I have prepared simply as an aid to determination. It is purely artificial and does not pretend to exhibit to any extent the natural relationship existing between the species. The value of the black dot on the propleura as a specific or even a sexual character is perhaps somewhat questionable, but as it is practically uniform in all the species before me, and a convenient character, I have ventured to make use of it, trusting to future observations to prove or disprove its utility.

SYNOPTIC TABLE.

- 1 (16) Face unspotted.
- 2 (7) Elytra hyaline or more or less obscured, not transversely banded or maculated toward the apex.
- 3 (6) Propleura without a black spot.
- 4 (5) Entire insect green; elytra hyaline, nerves green.....1. *viridis* ♀
- 5 (4) Ferruginous; elytra hyaline or nearly so, with a piceous band on the base of the clavus.....2. *basalis*
- 6 (9) Propleura with a black spot. Color dull green or brown, elytra smoky, at least on the apex and inner margin.....1. *viridis* ♂
- 7 (2) Elytra colored, more or less distinctly banded or spotted with hyaline, at least toward the apex.
- 8 (15) Propleura with a black spot.
- 9 (10) Ferruginous; clypeus short and broad, loræ inconspicuous; size large.....
3. *ferrugineoides*
- 10 (9) Brown or brownish, at least above, or pale yellow; clypeus of medium length or long, loræ conspicuous (except in *trimaculata*).
- 11 (12) Rugæ very prominent; clypeus long and narrow, ventral plate of ♀ distinctly convex, elytra brown with a pale point on the disk....4. *insignis*
- 12 (11) Rugæ not very prominent; clypeus broad, impressed beyond the loræ; ventral plate of ♀ flat.
- 13 (14) Beneath and legs dark brown or black; elytra brown trimaculate with pale...
5. *trimaculata*
- 14 (13) Beneath and legs pale; elytra whitish hyaline bifasciate with brown.....
6. *bifasciata*
- 15 (8) Propleura without a black spot. Yellow, elytra bifasciate with brown.....
7. *flavescens*
- 16 (1) Face spotted. Insect pale green; elytra hyaline, nerves fuscous or at least tinged with brownish.....8. *punctifrons*

1. *Pediopsis viridis* Fitch, Homop. of the N. Y. State Cabinet, p. 59, (1851); Walker, List of Homop., IV, p. 1162, (1852), [*Bythoscopus*]. Uhler, Bull. U. S. Geol. and Geog. Surv., III, p. 467, (1876). Van Duzee, Can. Entom. XXI, p. 9, (1889).

Female.—Uniform pea-green or yellowish-green, generally fading to a yellowish color in the dried specimens. Legs and beneath paler. Face finely punctured below the rugæ above indistinct, frontal sutures conspicuous; clypeus long, extending for half its length beyond the loræ; eyes brown. Rostrum yellowish green, tip black. Pronotal rugæ feeble. Elytra greenish hyaline, rarely very faintly obscured toward the apex; nerves green, pale toward the tip. Wings very delicate whitish hyaline. Claws and an annulus of small teeth at the tip of the posterior tibia black.

Male.—Obscure green or brown; face and scutellum paler; elytra brown, at least on the apex and inner margin. Facial punctures and frontal rugæ rather more distinct than in the female. Scutellum finely and obscurely punctured. Propleura with a black spot. Beneath pale yellowish brown or honey-yellow with the venter fulvous, in brown examples; or yellowish green with the venter pale, in green examples. Tarsi black or more often only tipped with black. Elytra varying from pale green with a smoky cloud on the apex and inner margin to uniform deep smoky brown. Wings faintly embrowned toward their apex or along their entire outer margin; nervules brown, conspicuous. Tergum greenish or ferruginous, more or less invaded with black, or the disk entirely black with the segments narrowly margined with pale.

Length, ♂, $4\frac{1}{2}$ –5 mm.; ♀, 5–6 mm.

The individual variation here encountered is considerable and of a very puzzling nature, and I do not feel fully satisfied that I have rightly defined the species here. Among 86 examples (47 ♂♂ and 39 ♀♀), now before me, 43 males agree in being of some shade of green or brown, with the elytra more or less smoky, and with a black spot on the propleura; of the females 37 agree in being of a uniform green of some shade with at most but a faint trace of brown at the apex of the elytra, and without a black spot on the propleura. I feel confident that the variation from green to brown in the males, and from yellowish to deep green in the females is not always or entirely dependant on the maturity of the individual. Of the six anomalous examples before me three males correspond very closely with the females in color, while two females mimic the males; this induced me formerly to consider them distinct species, but as the brown males and green females occur together in great numbers on the same willow bush both as young and adult, and with the entire absence of the similarly colored examples of the opposite sex, it seems necessary to unite them although I have not yet found them pairing.

This is by far our most abundant species of *Pediopsis* in Western New York. It lives on Willow and reaches maturity about the 20th of June, continuing abundant until August. I have also taken it at Muskoka Lake. Mr. Uhler records it from Colorado and has sent me an

example labeled "Md., June 18th, on Willow," and two small brown males from Nevada.

2. *Pediopsis basalis*, n. sp.

Form of *P. nussata* Germ. Ferruginous; abdomen olive green; elytra pellucid, slightly clouded at base and apex, a dark piceous band on the base bordering the scutellum. Length, 5 mm., ♀.

Head pale below; face finely and obscurely punctured, above with the central smooth line and radiating rugæ almost obsolete; eyes and ocelli black. Pronotum finely wrinkled; central smooth line nearly obsolete; posterior edge broadly, not angularly, concave. Scutellum finely punctured, darker at the basal angles. Elytra thickened and distinctly wrinkled on the base of the clavus, which is marked with a broad piceous band contiguous to the scutellar margin; base of the corium and apex broadly suffused with pale yellowish brown. Abdomen dirty olive green, the edge of the segments paler. Valves yellow, tipped with green. Tip of the tarsi brownish.

Described from a single female specimen, taken near Muskoka Lake, about the first of August, 1888. This large distinctly marked form can not be confounded with any other described species.

3. *Pediopsis ferrugineoides* n. sp.

Form broad and stout. Color ferruginous, lower half of the face and all beneath yellow, apex of the elytra and a transverse band beyond the middle subhyaline; propleura with a black spot. Length, $5\frac{1}{2}$ —6 mm., width of pronotum about 2 mm.

Vertex viewed from above very narrow; face broad and short, with coarse, shallow, not very distinct rugæ and punctures; frontal suture almost obsolete; loræ narrow, inconspicuous, quite widely margined by the cheeks; clypeus broad and short, scarcely projecting beyond the loræ, surface broadly impressed before the tip which is rounded, base tumid with a central depression; tip of the rostrum black. Pronotum darker on the disk; an elongated yellow spot behind the eye, more or less distinct, and a trace of the same color at the apex; rugæ distinct but not conspicuous; posterior margin rather deeply concave. Scutellum coarsely punctured with five yellow spots, two placed within the basal angles, two smaller ones on the middle of the lateral margins, and an abbreviated longitudinal line on the middle of the base; apex yellowish. Legs pale yellow. Abdomen bright fulvous, the venter paler. Elytra ferruginous, paler towards the apex; a transverse band near the tip of the clavus and the apex more or less distinctly subhyaline, the included ferruginous band may be reduced to a spot on the apex of the sutural margin by the costal coalescence of the clear bands, veins concolorous. Wings milky transparent, veins white.

Montana. Two examples, both females, received from Mr. Uhler. One, a pale individual, evidently immature, exhibits but traces of the yellow markings on the pronotum and scutellum. This is the largest species of *Pediopsis* that has come under my observation. It is well distinguished from all our other species by its short tumid clypeus and depressed loræ.

4. *Pediopsis insignis* n. sp.

Dull yellowish brown ♀, or blackish brown ♂; covered with a white bloom when fresh; elytra with a small pale spot beyond the middle; pronotal rugæ very distinct. Length, ♂, 4 mm.; ♀, $4\frac{1}{2}$ —5 mm.

Female.—Color, yellowish brown; superior tip and sometimes the apex of face darker; tip of the rostrum and claws black. Face coarsely and evenly punctured, rugæ distinct above, sutures of the front almost obsolete; loræ prominent, tumid, paler than the face; clypeus narrow, convex, sides scarcely depressed beyond the loræ. Ventral plate broad and rather short, disk distinctly convex, apex with deep notch. All the pleural pieces with a central black spot, that of the mesopleuron much the largest. Pronotum pale yellowish brown; a large dusky patch on the disk almost reaching the anterior margin in the middle, with a curved extension on each side along the hind edge nearly to the humeral angles; rugæ very distinct and oblique over the entire surface; posterior margin deeply arcuated. Scutellum pale brown, the basal angles and sometimes the apex with a dusky spot. Elytra uniform pale brown, or slightly paler near the apex of the costa; nervures pale, a small pale spot on the base of the two inner ante-apical cells. Abdomen more or less tinged with ferruginous, the posterior margin of the segments narrowly pale; valves sometimes dusky. Wings smoky hyaline, nervures fuscous. Legs concolorous with the abdomen, the tibiæ darker.

Male.—Blackish brown, elytral nervures scarcely paler; black areas much extended, especially on the abdomen which may be entirely black, with the margins of the segments pale; otherwise like the female.

Many examples taken at Lancaster, N. Y., July 9th, 1889, on low bushes of Wild Plum. One ♀, taken at Madison, Kan., by my brother M. C. Van Duzee, only differs from the eastern examples in the slightly darker color and abbreviated elytra which reach only to the tip of the abdomen. Superficially this resembles the *trimaculata* but differs from it and from all our other species by the form of the clypeus and ventral plate and by the conspicuous striation of the pronotum, approaching in this respect the European species.

5. *Pediopsis trimaculata* Fitch. Homop. N. Y. State Cab., p. 60, 1851.

Dr. Fitch's description of this species is as follows:

"Dull brown; scutel with a black spot at each angle, the posterior one sometimes obsolete; elytra with pellucid white spots, situated, one on the apex, one on the disk, and a third anteriorly; scutellar region obscure cinereous; face whitish. Length, .18 inch. No. 785, ♀."

On the 4th of July, 1885, I took at Colden, N. Y., a single female of this species of which the following is a description:

Form short and robust. Color soiled yellowish brown, face and scutel paler. Apex of the clypeus and coxæ, knees, tarsi, penultimate joint of the rostrum before, margin of the mesosternum, and the venter pale yellowish. Facial rugæ distinct; front rather coarsely punctured. Outer cheeks and pleural pieces black. Antennæ and spines of the posterior tibiæ pale. Valves dusky on the sides. Basal angles of the scutel black. Elytra reaching the tip of the abdomen; clavus deep brown; corium pale grayish white, a large patch near the middle scarcely reaching the claval suture, and extending along the costa to the shoulder, and a transverse band before the apex brown. Length, $5\frac{1}{2}$ mm.

The elytra are of an unusually thick, almost coriaceous texture, with the surface more distinctly wrinkled than in our other species; possibly they are variable in length as in *insignis*. This is probably a rare species.

6. *Pediopsis bifasciata* n. sp.

Brownish ferruginous, pale beneath. Elytra whitish hyaline bifasciate with fuscous. Length, $5\frac{1}{2}$ mm.
Face finely and obscurely punctured; clypeus pale yellowish, broadly depressed and smooth at the apex, clothed with scattering minute hairs; loræ conspicuous, almost concealing the lower part of the cheeks; rostrum rather long, tip black; eyes black. Pronotum finely wrinkled, darker on the disk, the posterior margin narrowly pale; lateral margin rather long with a black spot between the eye and the base of the elytra. Angles of the scutellum darker. Beneath pale honey yellow; pleural pieces and femora, except at base, tinged with ferruginous. Propleura with a black spot. Claws and metanotum black. Tergum yellowish brown, darker toward the apex. Elytra whitish hyaline with a transverse fuscous band, displaced on the claval suture, crossing near their middle, and another just before their apex; nervures colorous. Wings hyaline, nervures pale fuscous.

The amount of fuscous on the elytra is perhaps subject to variation. In the present example the hyaline surface slightly exceeds the fuscous, and the space between the fuscous bands has a clearer whitish aspect. Described from one ♀ taken at Muskoka Lake the last of July 1888.

This species bears a certain resemblance to the *trimaculata* of Fitch, but it is larger and stouter, the lower surface and legs are pale, the sculpturing of the head and thorax is much finer, and the elytra are differently marked.

7. *Pediopsis flavescens* Prov. Naturaliste Canadien, IV, p. 376, 1872.

Pale yellowish or greenish yellow; abdomen fulvous; elytra with two transverse brown bands. Length, $4\frac{1}{2}$ mm., ♀.

Head, pronotum and scutellum pale yellow or greenish yellow, finely punctured. Clypeus broad, not tumid, the submargin depressed before the loræ, the apex broadly rounded. Eyes brown. Posterior margin of the pronotum rather deeply concave, the rugæ indistinct. Elytra whitish hyaline, obscurely washed with yellowish at the base, with two broad pale brown transverse bands, one near the middle, the other on the apex but omitting the extreme tip. Abdomen fulvous, edges of the dorsal segments, inner margin of the valves, and ventral plate sometimes whitish. Legs pale whitish yellow.

Two examples; Muskoka, Ont., July 1888, and Lancaster, N. Y., June 27th 1889. This species most nearly resembles the preceding but they are sufficiently distinct.

It is not without misgivings that I refer this insect to M. Provancher's species. It is larger than he indicates, is not "washed with brown on the thorax," and the elytral bands are more distinct; but this character is, I think, liable to vary, and the two former could be reconciled by assuming that he drew up his description from a male. With our present meagre knowledge of the North American *Bythoscopidæ* an erroneous determination seems preferable to the possible creation of a new synonym. The following translation of M. Provancher's description will afford a ready means of comparison should more promising material be procured later.

"Length, .12 inch. Yellowish; thorax washed with brownish; clytra hyaline, washed with yellowish at the base, carrying near the middle and at the apex ill defined, more or less apparent spots. Vertex narrow, slightly triangular before the same as the front of the prothorax. Elytra longer than the body. Beneath and feet also yellow."

8. *Pediopsis punctifrons* Uhl. MS.

Similar in form to *P. scutellata* but smaller. Pale or yellowish green; face and scutel with black spots; elytra hyaline with brown nervures. Length, $3\frac{1}{2}$ —4 mm., width, about $1\frac{1}{2}$ mm.

Male.—Head broad, less angular before than in *viridis*. Face with distinct but shallow punctures and wrinkles, these broken and somewhat obscure on the front; frontal sutures distinct; loræ of medium width, scarcely tumid; clypeus broad, the sides rounded, with a slight depression beyond the loræ. In fully colored examples there are fine black spots on the face; one above near the tip, another on each side directly above the ocellus, and two comma-shaped spots facing each other on the upper part of the front. Ocelli brown. Eyes pale. Tip of the rostrum black. Propleura with a black spot. Legs and all beneath pale green. Pronotum with distinct rugæ; anterior margin quite strongly depressed each side of the center behind the eyes where there is a row of four or five impressed black points, or a black line; disk sometimes suffused with brownish. Scutellum pale with a broad black central longitudinal line, widened toward the apex where it is divided by a slender pale line; in pale examples this line is broken into three small spots arranged in a triangle; each side of this central line and immediately before the transverse depression is a round black point; and within the basal angles are triangular black spots. Elytra hyaline, greenish at the base, the nervures brown; generally there are one or more extra transverse nervures in the anti-apical cells. Wings transparent with brownish veins. Tergum yellowish green.

The female differs from the male in being paler, with the elytral nervures greenish or but slightly embrowned, and in having the black spots much reduced or some of them wanting. The round black points on each side of the vertex and disk of the scutellum are the last to be effected and are probably never entirely absent.

Arizona. Collected by the late Mr. H. K. Morrison. Described from seven examples; four received from Mr. Uhler and three from the Cornell University collection.

A little lot of *Callimorpha contigua* is now feeding on *Rubus* and *Rosa*. To the kindness of Mr. Schœnborn I owe the eggs, taken from several captured females all exactly alike, as I had an opportunity of seeing. I tried the young larva on Plantain and several others of the ordinary *Arctiid* food plants, but they refused everything but a leaf of Black-cap Raspberry which got in by accident. They will eat also Blackberry and Rose, but took nothing else.