

## SOME NEW SPECIES OF NEARCTIC TINGIDAE.\*

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In working up the material for the "Tingitoidea of Ohio"† we found a few new forms from other states that were not included as they were not likely to be found in Ohio. Since the publication of this paper, we have received a few specimens from other states for identification, including a few new forms. We believe that a description of these forms will prove useful to other workers in this group and in view of this fact we are publishing a description of these new species.

### *Acalypta ovata* spec. nov. (Fig. 1.)

With new material received and with specimens already in hand of *Acalypta lillianis* we have concluded that the supposed dimorphic forms as given by Bueno are not one species, but two distinct forms. The striking differences in the head and antennal characters make the association of the two forms unwarranted unless it can be definitely proven by mating or reared specimens. We have ♂ and ♀ specimens of the brachypterous form and only ♀ specimens of the macropterous form; the short-winged form we describe herein as new. *A. ovata* can be readily separated from *lillianis*‡ (macropterous form) by its longer head and face, the curved basal segment of the antennæ, and the much larger and longer processes or tubercles between the eyes and antennæ.

Head long, narrow, armed with two diverging spines; vertex quite long. Rostrum reaching the middle of the first abdominal segment. Antennæ moderately long, beset with a few short hairs; first segment considerably swollen, curved; second segment slightly swollen, shorter than the first; third segment longest, slender, three times the length of the fourth; fourth segment fusiform, about equal to the first and second.

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†Ohio Biological Survey Bulletin 8, 1916.

‡Westwood in "Introduction to the Modern Classification of Insects," Vol. II, "Generic Synopsis," page 121, gives the generic description of the genus *Acalypta* as follows: "Prothorax with the sides slightly dilated, 3-carinated; antennae long, clavate, hemelytra meeting in a straight suture; wings wanting." In the Ohio Biological Survey Bulletin, No. 8, Vol. II, No. 4, p. 220, we slightly amplified Westwood's original generic description so as to include *A. lillianis* (the long-winged form) and we do not now feel warranted in placing it in another genus. In this species the sutural area is broad and rounded and the inner margins do not meet in a straight suture; true wings are also present.

conjoined. The process or tubercle between each eye and antenna rather large and curved inwardly. Pronotum coarsely punctate; the three median carina slightly sinuate. Hood extending over the base of the head. Membranous pronotal margins subquadrate, with two rows of areolæ. Elytra short, inner margins meeting in a straight suture. Length, 2.35 mm.; width, 1.2 mm.

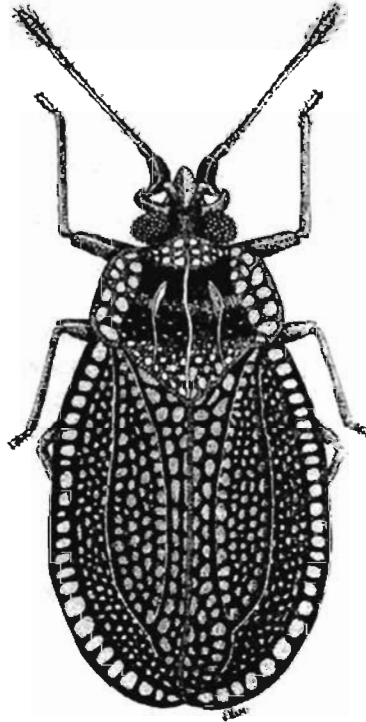


FIG. 1. ♀ *Acalypta ovata* n. sp. (From drawing by J. I. Hambleton).

The ♂ agrees with the ♀ in size, head characters, etc. The ♂ genital segment is tumid and transversely rugose; the ♀ genital segment is longitudinally striate and convex on the posterior border.

Color: General color dark-gray. Antennæ griseus, first, second, and fourth segments blackish. Pronotum dark-gray; disc blackish. Elytra dark-gray. In one specimen that seems to be a teneral form, the color is much lighter.

Described from two ♀ specimens, the type taken at Durham, New Hampshire (C. M. Weed), and the paratype at Ottawa, Canada, by Mr. W. H. Harrington.

***Corythucha immaculata* spec. nov.**

Antennæ beset with a few long bristly hairs; first segment slightly more than twice the length of the second, moderately swollen; second segment short, less swollen than the first; fourth segment swollen toward the apex. Rostrum reaching between the posterior coxæ. Membranous pronotal margins broad, kidney-shaped, bullate about the middle, slightly turned up at the posterior margins, entire outer margins armed with rather small, closely set spines. Hood closely reticulated, abruptly constricted about the middle; anterior portion long and narrow; posterior portion subglobose. Pronotum more or less indistinctly reticulated; sides of posterior triangular process rather strongly raised anteriorly, with five or six distinct areolæ. Median carina foliaceous, with two nearly complete irregular series of unequal areolæ. Wings a little longer than the abdomen. Elytra quite closely reticulated, outer margin slightly sinuate; costal area rather coarsely and unevenly reticulated, with three complete and a partial series of areolæ; subcostal, discoidal, and sutural areas (except row of large cells on inner margin) closely reticulated. Length, 4.1 mm.; width, 2.15 mm.

Color: Body beneath black. Legs and antennæ testaceous. Nervures of hood, membranous pronotal margins, posterior triangular process of pronotum, and elytra yellowish. Areolæ translucent.

Described from two specimens, taken at Alameda, California, by Mr. Albert Koebele. We have one specimen from Santa Cruz Mountains, California, that has a few nervures slightly tinged with testaceous.

***Corythucha obliqua* spec. nov.**

Antennæ beset with a few long, stiff hairs; first segment moderately swollen, about twice the length of the second; second segment less swollen, shortest; third segment very long, cylindrical; fourth segment considerably swollen towards the apex. Rostral groove rather broad; rostrum reaching the intermediate coxæ. Pronotum coarsely and regularly punctured; membranous margins broad, kidney-shaped, quite closely reticulated, strongly bullate about the middle, slightly reflected behind, the dorsal surface armed with a few erect spines; posterior, triangular portion reticulated at the apex, the sides raised anteriorly, with five or six distinct areolæ; median carina considerably raised, with one complete row and two divided areolæ about the middle forming double cells. Hood moderately raised, rather closely reticulated, armed with a few short spines on the sides, quite abruptly constricted about the middle, globose behind. Wings a little longer than the abdomen. Elytra broadly rounded at the apex, outer margin slightly sinuate; costal area with three complete series and a partial row of areolæ near the base. Length, 3.45 mm.; width, 1.44 mm.

Color: Antennæ yellowish. Legs dusky-yellow; tarsi somewhat embrowned. Body beneath black. Hood dark-fuscous, except a few

areolæ yellowish. Pronotum dark-fuscous; apex and raised sides of triangular process yellowish. Expanded margins of pronotum mostly dark-fuscous; centers of areolæ hyaline. Elytra yellowish, a rather broad band near the base, a slightly narrower, oblique band near the apex, a few transverse nervures of costal area, and more or less of sutural areolæ dark-fuscous; areolæ of costal area hyaline. Nervures of apical areolæ dark-fuscous; areolæ hyaline, a few slightly infuscated.

Described from a single specimen, taken at Dutch Flats, California, by Mr. Chas. Dury.

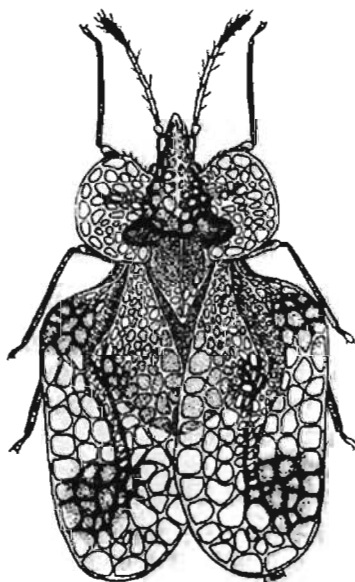


FIG. 2. *Corythucha mollicula* n. sp.

***Corythucha mollicula* spec. nov. (Fig. 2).**

Differs from the other northern and eastern species in having the lateral spines on the pronotum (except anterior border) and elytra almost entirely wanting.

Antennæ with a few long bristly hairs; first segment swollen, twice as long as the second; second segment slightly less swollen, very short; fourth segment swollen toward the apex. Rostrum reaching between the intermediate coxæ. Membranous pronotal margins very broad, slightly bullate about the middle, slightly turned up at the posterior end, anterior margin only armed with a few small spines. Hood rather evenly reticulated, moderately elevated, not very abruptly constricted about the middle; anterior portion rather long, not very narrow.

Pronotum coarsely punctate; posterior triangular process reticulated, the sides raised anteriorly with a few distinct cells. Elytra quite broad, considerably longer than the abdomen, spines on outer margin almost entirely obsolete; costal area coarsely reticulated, with three complete series of areolæ; sutural area broad, coarsely reticulated. Wings longer than the abdomen. Length, 3.4 mm.; width, 2.16 mm.

Color: General color light gray marked with brown; centers of areolæ hyaline. Body beneath black. Anterior portion of hood light gray and the posterior part brown; center of areolæ semitransparent. Membranous pronotal margins light gray, a few veinlets near the border slightly embrowned. Pronotum brown; posterior triangular portion light gray. Elytra light gray; basal area, part of bullate area, and a subapical area chestnut brown; the veinlets are widely opaque with only the centers hyaline. Antennæ dirty white; fourth segment infuscated. Legs brownish-gray.

Described from a single specimen, labeled "June 12, 1890, Agricultural College, East Lansing, Michigan."

***Corythucha distincta* spec. nov.**

Readily separated from allied species by the angular upper line of the hood, the outer convex margin of the elytra, the lack of spines on the outer and posterior margins of the membranous pronotal margins and outer margin of the elytra.

Antennæ with a few long bristly hairs; first segment moderately swollen, about twice as long as the second; second segment very short, less swollen than the first; third segment very long, cylindrical; fourth segment swollen toward the tip. Rostral groove moderately wide, very deep; rostrum reaching between the intermediate coxæ. Membranous pronotal margins broad, rather long and narrowing posteriorly, reniform, bullate about the middle, rather closely and evenly reticulated, slightly bent up posteriorly, anterior margin only armed with a few small spines. Hood abruptly constricted about the middle, quite evenly reticulated; anterior portion long, narrow, the sides depressed; posterior portion somewhat angular, a median line forming a distinct angle with the anterior portion of the hood. Dorsal surface of the membranous pronotal margins and elytra, and sides of hood armed with a few spines. Pronotum rather closely and evenly punctured; posterior triangular process reticulated, the sides strongly elevated anteriorly, with five or six distinct areolæ. Median carina moderately raised, with a double series of areolæ about the middle. Wings about as long as the abdomen. Elytra considerably longer than the abdomen, narrowed posteriorly, outer margin slightly convex, the basal reflected outer margin only armed with short spines; costal area with three complete and a partial series of areolæ; sutural area with a row of large areolæ on the inner margin. Length, 4 mm.; width, 2.41 mm.

Color: Body beneath black. Antennæ pale brown; apical segment infuscated. Legs pale brown; tips of tarsi blackish. Hood, pronotal

margins, and elytra yellowish-gray. A rather large spot on each side of the hood, an anterior and posterior area on each pronotal margin, a basal and an apical band on the elytra (also bullate portion) fuscous-brown. Pronotum olive-brown.

Type specimen labeled "Colo.," received from Prof. C. P. Gillette, Fort Collins, Colorado. A second specimen from the same state agrees in size and form, but is uniformly a trifle lighter.

***Corythucha associata* spec. nov.**

This species is quite like *C. aesculæ*, the buckeye Tingid, it being about the same size and of a similar color; but differs from that insect by its shorter and narrower anterior portion of the hood and the posterior portion is considerably more globose. The position of the strongly deflected hood is between *aesculæ* and *bulbosa*.

Moderately large and broad. Antennæ beset with bristly hairs; first segment swollen, three times as long as the second; second segment short; fourth segment swollen toward the apex. Rostrum reaching between the intermediate coxæ. Membranous pronotal margins broad, bullate about the middle, slightly turned up posteriorly, rather evenly reticulated, entire margins armed with closely set spines. Hood more highly elevated than in *aesculæ*, very abruptly constricted near the middle; anterior portion short and narrow; globose portion high and quite large. Pronotum punctate; triangular process reticulated, the sides raised anteriorly, with a few distinct areolæ. Median carina considerably raised. Elytra broad, considerably longer than the abdomen, broadly rounded at the tip, the outer margin slightly concave and the inner apical margin obliquely rounded. Length, 4.1 mm.; width, 2.4 mm.

Color: General color brownish. Body above and beneath blackish. Antennæ yellowish; terminal segment slightly embrowned. Legs yellowish; tips of tarsi brownish. Membranous pronotal margins hyaline, with one or two spots embrowned. Hood infuscated, the center of a few areolæ hyaline. Elytra hyaline, with a broad band near the base, another at the tip (except the distal part of the apical series of areolæ and two large cells within the band) and more or less of sutural area fuscous.

Described from a very long series of specimens, taken during August and September at Clarksville, Tennessee, by Messrs. Louis Stearns and E. H. Vance, on wild cherry, *Prunus serotina*. We have another specimen, taken June 25, 1915, at Lexington, Tenn., by Mr. D. M. DeLong. This species differs greatly from *C. pruni* by the larger hood, longer basal segment of the antennæ, etc.

**Melanorhopala duryi** spec. nov. (Fig. 3d.)

Somewhat allied to *M. uniformis* Stal, but easily distinguished from that species by the shorter and more swollen third segment of the antennæ and its much smaller size.

Antennæ rather stout, short, closely beset with short decumbent hairs; first segment a little longer and stronger than the second; second segment very short; third segment moderately long, quite stout, more strongly swollen toward the tip; fourth segment short, slender, conical.

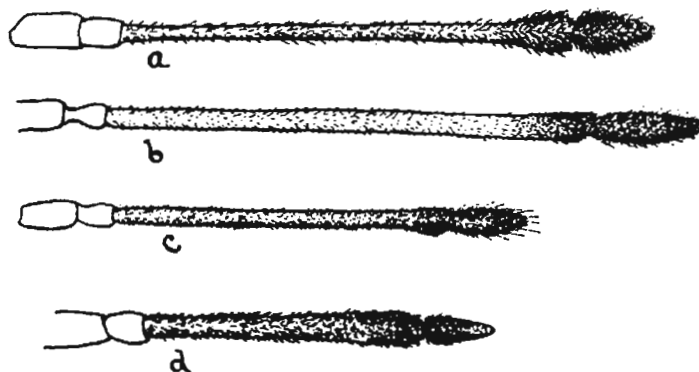


FIG. 3. Antennæ: a, *Melanorhopala clavata* Stal; b, *M. lurida* Stal; c, *M. clavata* Stal; d, *M. duryi* n. sp. (Drawings by J. I. Hambleton).

Rostrum very long, reaching between the posterior coxæ. Head with five long deflected spines. Pronotum narrowed in front, with three longitudinal carinæ; membranous pronotal margins narrow, reflected back against the surface of the pronotum. Elytra extending a little beyond the apex of the abdomen; discoidal area extending beyond the middle of the elytra; boundaries between discoidal, sutural, and subcostal areas strongly raised. Length, 3.45 mm.; width, 1.9 mm.

Color: General color, dull yellow-brown; apex of third and fourth antennal segments infuscated.

Described from a single ♀ specimen, taken at Brownsville, Texas, by Mr. Chas. Dury.