

## NOTES ON AMERICAN TINGITIDAE (HEMIPTERA).

BY CARL J. DRAKE, Ames, Iowa.

Further study of collections of American Tingitidae has made it necessary to erect two new genera, describe two new species, rename one species, and suppress two species as synonyms. The descriptions and notes on the homonym and synonyms are given below.

***Acalypta duryi* n. name.**

This name is proposed for *Acalypta* (= *Drakella* Bergroth = *Fenestrella* Osborn and Drake) *ovata* Osborn and Drake, the specific name of *ovata* being preoccupied and a homonym in the genus *Acalypta* Stål. As yet this species has been recorded only from the type locality, Cincinnati, Ohio; it is represented by three brachypterous specimens, collected by Mr. Chas. Dury.

*Acalypta saundersi* (Downes).

Many brachypterous examples, Puyallup, Washington, March, 1929, collected on moss, by Mr. Wm. W. Baker. Up to the present time this remarkable species has been known only from a brachypterous female, holotype, Goldstream, B. C., collected in a low marsh area by Mr. L. G. Saunders. Male a little more slender than the female; claspers large and strongly curved; other characters very similar to female. It is most closely allied to the foregoing species, *A. duryi* Drake, but very distinct as pointed out by Downes in his original description. Allotype, brachypterous male, Puyallup, Wash., in writer's collection. The long-winged form is unknown.

*Corythaica bellula* Bueno.

*Corythaica bellula* Bueno, Bull. Brookl. Ent. Soc., XII, 1917, p. 19.

*Corythaica bellula* Blatchley, Heter. East. N. A., 1926, p. 471.

*Corythaica floridana* Blatchley, Heter. East. N. A., p. 471.

The holotype (brachypterous) in Blatchley's collection has been examined. It is identical with similar winged forms of *bellula* from New York and should be treated as a synonym of Bueno's species. *Bellula*, as represented by brachypterous and macrop-terous specimens, shows a considerable variation in size and color. Through the kindness of J. R. de la Torre-Bueno and Chris.

Olsen many specimens, including the types of *bellula*, have been studied. The species of *Corythaica* are greatly confused in the literature, especially the species occurring in the West Indies and South America.

*Melanorhopala clavata* Stål.

*Melanorhopala clavata* Stål, Enum. Hemip., 111, 1873, p. 130.

*Melanorhopala lurida* Stål, Enum. Hemip., 111, 1873, p. 131.

*Melanorhopala uniformis* Stål, Enum. Hemip., 111, 1873, p. 131.

*Melanorhopala obscura* Parshley, Psyche, XXIII, 1916, p. 167.

*Melanorhopala reflexa* Blatchley, Heter. East. N. A., 1924, p. 492.

*Melanorhopala clavata* Blatchley, Heter. East. N. A., 1926, p. 492.

*Melanorhopala clavata* Drake, Ann. Carn. Mus., XVI, 1926, p. 377, pl. XXIV, figs. a, b, c.

The holotype of *reflexa* in the Blatchley collection has been examined, and without a doubt it represents an extremely long-winged form of *clavata*. Sexual dimorphism of the antennae and pterygopolymorphism cause marked changes in general appearance, size and modification of certain structures. Macropterous individuals are represented by long-winged and extremely long-winged individuals, the latter being very rare in collections and identical with the form described by Blatchley as *reflexa*. The three different types of wings are represented in a long series of specimens collected on weeds near Chicago, Illinois, by Mr. William J. Gerhard. The writer has also collected this form in the prairies at Ames, Iowa. However, most series of specimens contain but two forms, either the short- or the usual type of long-winged individuals. The third segment of the antennae is slightly clavate in the male and strongly clavate in the female. In the latter the fourth segment is also thicker at the base. In the brachypterous specimens the clytra are acute posteriorly with their tips distinctly separated.

*Allotisingis* n. gen.

Head short, distinctly tumid above, with the three frontal spines arranged as in related genera. Bucculae broad, long, contiguous in front, extending anteriorly in front of head.

Coxae widely separated; rostral laminae not strongly developed, almost cariniform; rostral channel broad, uninterrupted; rostrum extending on the mesosternum. Antennae long, slender, widely separated at base; segment I very long, longer than head, a little stouter than II; III very slender, rather long. Antenniferous tubercles very long, slender.

Pronotum moderately swollen, finely and closely pitted, unicarinate; posterior projection short and rounded; collum long, conspicuous; paranota reticulate, expanded laterally, projecting anteriorly beyond collum. Elytra about one-third longer than abdomen; not overlapping, meeting in an almost straight (very slightly rounded) line along the median line of abdomen; areolae moderately large, hyaline; discoidal and sutural areas not very clearly differentiated; costal and subcostal distinct. Wings greatly reduced or wanting.

Type of genus, *Leptobyrsa binotata* Drake and Bruner, from Cuba. This genus is most closely allied to *Leptobyrsa* Stål, but differs from it in the characters of bucculae, collum, pronotum, shorter and more closely reticulated elytra, and longer basal segment of antennae. The bucculae project very strongly obliquely forward and downward from the base of the tylus, thus extending considerably in front of the head. The male genital characters are also quite different.

#### **Liotingis** n. gen.

Pronotum closely and finely pitted, slightly swollen, strongly narrowed in front, tricarinate. Collum very large, distinctly marked off, finely reticulate. Paranota projecting almost laterally, scarcely reflexed, extending anteriorly a little beyond collum. Antennae long, slender; segment I long, considerably thickened, longer than head, the second segment very short; III very long, slender; IV long and slender. Antenniferous tubercles very long, slender, straight; divaricating, spine-like in appearance. Head short, with five spines. Bucculae large, closed in front not extending anteriorly in front of head; rostral channel uninterrupted, open behind, the laminae widely separated on mesosternum. Orifice indistinct. Legs long and slender. Elytra considerably longer than abdomen, overlapping, the areas distinctly marked off; discoidal area reaching to middle of elytra. Wings present.

Genotype, *Liotingis evidentis* n. sp., from Brazil. This genus belongs to the distinctly lacy group of Tingitidae. It is perhaps

most closely related to the genus *Allotisingis* Drake, but readily separated from it by the extremely long, divaricating, spine-like antenniferous tubercles, the overlapping elytra, and character of the bucculae. The antenniferous tubercles separate *Liotisingis* from *Leptopharsa* Stål and other closely related genera.

***Liotisingis evidentis* n. sp.**

Moderately large, almost flat in appearance, testaceous, the head and body brown. Antennae very long, slender, with long bristle-like hairs; segment I very long, brown, moderately swollen, thickest near the middle, between four and five times as long as two; III long, slender, slightly curved, testaceous, about three and one-half times as long as four; IV very long, slightly enlarged, mostly black. Rostrum extending to middle of mesosternum. Antenniferous tubercles very long, rather sharp, spine-like, divergent. Head with five sharp spines; anterior pair long, directed anteriorly, contiguous at apex; median short, slender, not prominent; posterior pair longest, directed forward, contiguous with head, extending to base of anterior pair. Eyes small, transverse, brown.

Collum very large, reticulate, subtruncate in front, slightly raised in the middle. Paranota moderately broad, almost rectangular, uniseriate along humeri, bi-triseriate in front, acutely produced in front and extending to middle of eyes; outer margins almost straight, converging anteriorly. Carinae indistinctly areolate; median slightly more elevated and more strongly raised on collum; lateral ending anteriorly at collum, parallel. Elytra about one-third longer than abdomen, broadly rounded behind, the tips separated; discoidal and sutural area slightly and jointly elevated; costal area broad, biseriata at base, triseriate at widest part, the areolae not very regularly arranged; subcostal area rather narrow, uniseriate, strongly sloping obliquely downward; discoidal area large, almost elongate-elliptical, narrow at both ends, with four rows of areolae at its widest part, with a black-fuscous spot a little behind the middle on the costate nervure forming outer boundary. The margins of elytra, paranota, carinae, and enlarged nervures marking off areas of elytra indistinctly serrate. Wings a little longer than abdomen, faintly clouded. Legs long, slender, testaceous. Length 2.97 mm.; width 1.29 mm.

*Holotype*, female, Minas Geraes, Brazil, in collection of writer.

**Leptopharsa lenatis** n. sp.

Elongate, fuscous-black. Antennae and legs dark fuscous-black, somewhat polished; areolae of hood and sutural and discoidal areas clouded with fuscous; those of paranota, carinae, and costal and subcostal areas translucent. Head black, with five rather long, slender, dark brown spines, the median longest. Antennae long, slender, indistinctly pilose; segment I rather long, slightly curved, considerably swollen, two and a half times as long as two, the latter shorter and slenderer; III very long, three times as long as four; IV long, slightly swollen, pilose, considerably longer than one and two taken together. Bucculae black, margined with testaceous, closed in front. Rostrum long, brownish, extending to the end of metasternum. Rostral laminae strongly developed, reticulate, mostly testaceous, open at apex. Body beneath black.

Pronotum strongly narrowed anteriorly, coarsely pitted, reticulate behind, tricarinate. Carinae strongly foliaceous, each composed of one row of large areolae; lateral carinae parallel, rounded above, long, not touching sides of hood; median more strongly elevated, abruptly raised a little behind the hood. Paranota moderately broad, biseriate, strongly recurved, the areolae rather large. Hood moderately large, projecting slightly over base of head, sub-globose. Elytra considerably longer than abdomen, rounded behind, widest a little behind the base; their tips not separated when at rest; costal area rather broad, mostly biseriate, triseriate at widest part; subcostal area broad, almost vertical, bi-triseriate; discoidal area large, widest near middle, the outer nervure costate and strongly raised, narrowed behind. Wings longer than abdomen, somewhat clouded. Legs long, slender, polished. Length, 4.24 mm.; width, 1.41 mm.

*Holotype*, female, Perú, S. A., in writer's collection. *Paratype*, female, Santarem, Brazil, Carnegie Museum; is a little lighter in color than the type. Differs from *L. peruensis* Drake and *distinconis* Drake in color, position of elytra when at rest and several structural characters as noted in descriptions.