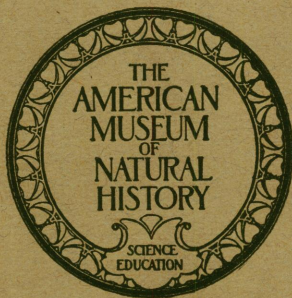


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OF
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VOLUME XXXVIII, 1918



NEW YORK
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1918

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EDITED BY FRANK E. LUTZ

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ERRATA

Page 73, last line in foot-notes, for Vol. XXXIX read XXXIV.

" 109, line 9 from bottom, for *depectus* read *despectus*.

" 216, Fig. 16, for *Plianchenia* read *Pliauchenia*.

" 318, line 21 from bottom, for synonym read synonymy.

" 325, top line, for *L. caligenosus* read *L. caliginosus*.

" 358, last line, for *Hyperooden* read *Hyperoodon*.

Plate XLIII, in B. and D., for (*Spenodon*) read (*Sphenodon*).

BULLETIN
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Article I.—NORTH AMERICAN CICADELLIDÆ IN THE COLLECTION OF THE AMERICAN MUSEUM OF NATURAL HISTORY. SUBFAMILY CICADELLINÆ

BY CHRIS E. OLSEN

Through the courtesy of The American Museum of Natural History, I have been accorded the privilege of studying the Cicadellidæ in the collection of this institution. Much of the material is from localities which are not readily accessible. The specimens are in good condition but a large part of them have yet to be determined and arranged. It may be said that this group, as well as the other homopterous insects in the Museum, has received but slight attention and urgently needs to be studied in order to do justice to those who have aided in building up the collection.

Among those who have previously worked on this material should be mentioned Dr. Herbert Osborn and Mr. E. P. Van Duzee. They have identified a large part of the already named material, most of which needed only arrangement and some slight changes in nomenclature. There were about 500 specimens; more than 400 were collected in what is embraced in Van Duzee's "S. E.," viz., Connecticut southward to Georgia and Florida; less than 100 are from thirteen other states outside of this. North Carolina and Florida are best represented in specimens, the latter yielding the best material; New York and New Jersey are next; Arizona is represented by 61 specimens. In Van Duzee's new list 12 genera, 48 species, and 9 varieties are given for this group. I have been able, so far, to find 10 genera, 29 species and 3 varieties in this collection. One new species is added to the list.

The collection is mostly eastern and southeastern, but there can still be added from these regions 7 species and 4 varieties. We have, thus, about 80% of the Eastern species.

The nomenclature used is that of Van Duzee's recent 'Check List of Hemiptera of America North of Mexico' (New York Ent. Soc., 1916). Many changes of nomenclature have been made in that work, particularly in the group with which this paper deals. This is not the place to go into details concerning the merits of Van Duzee's List; it must, however, be cited as a great contribution towards straightening out the nomenclature. He makes the genus *Tettigoniella* Jacoby (1903, = *Tetigonia* Kirkaldy, 1900) a synonym of *Cicadella* Latreille (1817) with *viridis* Linné (1758) as orthotype; then, the name *Jassoidæ*, Van Duzee (1892), is dropped as a synonym of *Cicadellidæ*, Latreille (1825); and, further, the group *Tetigoniini* Kirkaldy (1906, = *Tettigoniellini* Jacoby 1903) is thrown out entirely and a new name, *Cicadellini* (Subfamily, *Cicadellinæ*), is used. This does away with the misspelled name *Tetigonia* and all other names based on this; it is to be hoped that it will remain thus.

Oncometopia undata (Fabricius). Well represented from many localities in Pennsylvania, North Carolina, and Florida. One specimen from Florida was labeled *Proconia nigricans* Walk.; this is one of Walker's many synonyms, of which there are seven others attached to the above name.

Oncometopia lateralis (Fabricius). Valley of Black Mts., N. C., June 21-Aug. 17 (Beutenmüller). Clearwater and Sanford, Fla., April 26-29 (Van Duzee). Coyote Mts., Ariz., Aug. 4-7; near Kits Peak, Baboquivari Mts., Ariz., Aug. 7-9; near Bear Wallow, Santa Catalina Mts., Ariz., July 12-17 (Lutz). Estes Park, Colo., July 5, Alt. 7,500 ft. (Butler). Boulder, Colo., July 27. The specimens from North Carolina are typical; but those from Arizona and Colorado are smaller, their veins are less marked with black, and, as a whole, they appear to be a geographic race of the true species. However, further study and more material is needed to ascertain this.

Homalodisca triquetra (Fabricius). Sanford and Clearwater, Fla., April 28-29 (Van Duzee). Brownsville, Tex., April.

Aulacizes irroratus (Fabricius). Black Mts., N. C., May-Sept. (Beutenmüller). Crescent City, Fla., April 23 (Van Duzee). Orange Grove, Fla., May (Siefert). Deep Lake, Fla., April 13, labeled "*A. guttata* Uhl.?" (Grossbeck). One old abdomenless specimen from New York (Edwards Coll.). The species is rather rare in New York and northward.

Cicadella viridis (Linneus). Silkeborg, Denmark (Jensen Haarup). The writer has added this to the collection; it occurs in Canada and is the type species of the *Cicadellidæ*.

Cicadella hieroglyphica (Say). Phoenix, Arizona (Kunze Coll.).

Cicadella hieroglyphica var. **dolobrata** (Ball). Boulder, Colo., July 6.

Cicadella hieroglyphica var. **uhleri** (Ball). Phoenix, Arizona (Kunze Coll.).

Cicadella gothica (Signoret). Abundantly collected in New York and New Jersey. Other specimens from Gray Beard Mts., N. C., May 26; Black Mts., N. C., May-Aug.; Valley of Black Mts., N. C., July 5-Aug. 21 (Beutenmüller). Little Dear Is., Me., Sept. 10 (Zabriskie). Colorado Springs, Col., June 15-30, Alt. 6,000-7,000 ft. (Wickham in the Zabriskie Coll.).

Cicadella circellata ? (Baker). Coyote Mts., Ariz., Aug. 4-7; Sycamore Canyon, Santa Catalina Mts., Ariz., Aug. 20; near Kits Peak, Baboquivari Mts., Ariz., Aug. 7-9 (Lutz).

Cicadella occatoria (Say). Gainesville, Fla., Sept. 26-Oct. 2, (Mutchler and Watson). Lake Okeechobee, Fla., May 2, Crescent City, Fla., April 23 (Van Duzee Coll.).

Cicadella marathonensis, new species

Large, broad; length, 6.5 mm.; width across eyes and hemelytra, 2 mm. Head short; anterior margin of vertex nearly continuous with outside margins of eyes. Transverse arcs on the front numerous and slightly raised. Vertex about half the length of pronotum, and its length less than half its width between the eyes at the base; surface finely punctured. Face, as seen from the side, moderately convex; clypeus straight and continuous with the profile of the face. Pronotum transversely sculptured with irregular, slight indentations. Scutellum with a slight transverse depression. Anterior tibiae simple. Hemelytra long and broad, but not entirely covering the lateral margin of abdominal tergum.

Vertex, anterior part of pronotum, and scutellum, yellow marked with black; remaining part of pronotum, bluish-gray marked with irregular black blotches unevenly scattered. Markings of vertex as follows: an apical triangular spot; a short distance on each side of this an irregular vitta running parallel with the triangle and nearly meeting its mate just in front of the center of vertex, then turning outwards to a little in front of ocellus, where it joins a large spot; two semi-quadrate spots evenly spaced between the ocelli; a triangular spot at the base below each ocellus; a short line in center at base; a spot between each ocellus and eye but close to the ocellus; in front of each of the last-named spots an irregular vitta continuing down along the suture of face and antennal ledge. On the face there are two dark brown, irregular vittæ, somewhat interrupted here and there, running down across the disk, starting obliquely at the edge of vertex (nearly reaching the markings above but not connected), then parallel to near the clypeus. Clypeus marked with a central, brown vitta. Rostrum dark brown and slightly hairy. Pronotum marked with irregular, unsymmetrical, black spots and blotches. Scutellum with two longi-

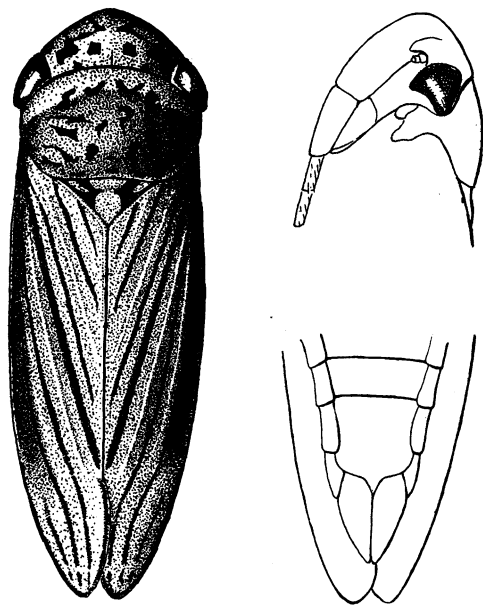


Fig. 1. *Cicadella marathonsensis*, new species. $\times 12$.

tudinal, black bars, constricted at the scutellar depression. Hemelytra gray; veins pale, indistinct or white; costal margin of corium pale; a jet black subcostal stripe commencing a short distance from the base and ending just before the membrane; parallel with this stripe is a broad sanguineous vitta commencing at the base and fading out at the membrane, half of its width lying in the outer anteapical cell. Costal margin of membrane marked with a brown border; all the cells of the hemelytra, except the outer and inner apical, are adorned with a brown stripe; these stripes have a tendency to be interrupted where they pass over cross nervures between the apical and anteapical cells; claval suture deep and strongly bordered with brown. Wings: apical area, milky white; basal area, black somewhat blending with the white of the apical area; veins, jet black. Abdomen, black above; lateral edge, yellow and partly exposed. Venter, yellowish-gray, mottled with brown. Legs, a dirty yellowish-gray. Pectoral pieces and abdomen, scantily pruinose in places. Genitalia: female segment as long as pygofers, broad, keeled and terminating in an acute point.

Described from one female collected by Dr. F. E. Lutz at Marathon, Texas, July 1, 1916.

Type in collection of American Museum of Natural History.

This species is readily separated from our other *Cicadella* by its robust appearance and shape of vertex. It comes very close to the genus *Kolla* Distant, its line of vertex being nearly continuous with the outside margins of the eyes, but, as will be seen in Fig. 1, there is a slight indentation between

these. Furthermore, the eyes and line of vertex are both slightly convex, and the vertex is not foveate as in *Kolla*. On the other hand, it is quite an unusual *Cicadella* with its short and broad vertex sloping and gently merging with the line of face, forming a rather graceful curve instead of an angle at the apex of head as is usual with our species of this genus. However, there seems to be no better place for it.

Kolla bifida (Say). Ramsey, N. J., Aug. (Lutz). Paterson, N. J., July (Grossbeck). Lake George, N. Y., Aug. 19; Clayton, Mass., Sept. 10 (Zabriskie Coll.). Valley of Black Mts., N. C., June 20-Aug. 31, and Black Mts., N. C., June-Sept. (Beutenmüller).

Kolla bifida* var. *fasciata (Walker). Gainesville, Fla., Sept. 26-Oct. 2; Monticello, Fla., Oct. 4-8 (Mutchler and Watson). Lakeland, Fla., May 8, and Ft. Myers, Fla., March 30 (Grossbeck). La Belle, Fla., Nov. 14 (Lutz). Crescent City, Fla., April 24 (Van Duzee Coll.).

Kolla geometrica (Signoret). Monticello, Fla., Oct. 4-8; Gainesville, Fla., Sept. 26-Oct. 2 (Mutchler and Watson). Sanford, Fla., April 28; Crescent City, Fla., April 23 (Van Duzee Coll.).

Kolla hartii (Ball). La Belle, Fla., Nov. 14; Fort Myers, Fla., Nov. 13 (Lutz). Sanford, Fla., April 28 (Van Duzee Coll.). Pensacola, Fla., Oct. 11-14 (Mutchler and Watson).

Kolla similis (Walker). Miami, Fla., Nov. 5 (Lutz). Panama, R. P., Feb.-March. San Jose, Costa Rica, March.

Helochara communis Fitch. Tompkins Cove, N. Y., Sept. 13 (Lutz). New York, N. Y., June 28 (Southwick Coll.).

Graphocephala coccinea (Forst). Represented by many examples from Massachusetts, New York, New Jersey, and North Carolina. Sanford, Fla., April 4-26 (Van Duzee).

Graphocephala versuta (Say). Valley of Black Mts., N. C., Aug. 31; Black Mts., N. C., July-Sept. (Beutenmüller). Sanford, Fla., April 26 (Van Duzee Coll.). Monticello, Fla., Oct. 4-8, and Gainesville, Fla., Sept. 26-Oct. 2 (Mutchler and Watson).

Dræculacephala floridana Ball. Everglade, Fla., April 11-15 (Grossbeck).

Dræculacephala 7-guttata (Walker). Sanford, Fla., May 3 (Van Duzee Coll.). Titusville, Fla., Nov. 8 (Lutz). Monticello, Fla., Oct. 4-8, and Pensacola, Fla., Oct. 11-14 (Mutchler and Watson).

Dræculacephala balli Van Duzee. Monticello, Fla., Oct. 4-8 (Mutchler and Watson). This species was recently described from Georgia, and has not hitherto been recorded from elsewhere.

Dræculacephala bradleyi Van Duzee. Ft. Myers, Fla., March 30 (Grossbeck). Crescent City, Fla., April 24; Sanford, Fla., April 26 (Van

Duzee). Lakeland, Fla., Nov. 10 (Lutz). Like the preceding species, this was described and recorded only from Georgia. Both species have been confused with *D. minor*.

Dræculacephala angulifera (Walker). Represented by many examples from New York, New Jersey, and Florida. Nome, Texas, June 30, and New Orleans, La., June 29 (Lutz). These were all placed with *D. mollipes*.

Dræculacephala mollipes (Say). Common from Massachusetts, Connecticut, New York, New Jersey, and North Carolina.

Dræculacephala minor (Walker). Pine Island, N. Y., Sept. 8 (Lutz). Sanford, Fla., May 3 (Van Duzee Coll.). Phoenix, Ariz. (Kunze Coll.). California (Edwards Coll.). The Pine Island record is an exceedingly northern one.

Dræculacephala inscripta Van Duzee. Fort Lee Dist., New Jersey, July 13. Recently described from one female taken in Georgia. This is the first record of its occurrence in New Jersey.

Dræculacephala manitobiana Ball. Spruce Brook, Newfoundland, Aug. 8 (Leng).

Dræculacephala noveboracensis (Fitch). Great Piece Meadow, N. J., Aug. 5; Ramsey, N. J.; Carmel, N. Y., Aug. 13 (Lutz). Wyandanch, L. I., N. Y., Aug. 21 (Olsen).

Dræculacephala reticulata (Signoret). New Orleans, La., June 29 (Lutz). Numerous examples from Florida.

Pagaronia tripunctata (Fitch). Valley of Black Mts., N. C., June 21–Aug. 30 (Beutenmüller).

Eucanthus acuminatus (Fabricius). Black Mts., N. C., June (Beutenmüller).