SOME NEW SPECIES OF DELTOCEPHALOID LEAFHOPPERS

(Homoptera Cicadellidae)

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SOME NEW SPECIES OF DELTOCEPHALOID LEAFHOPPERS

(Homoptera Cicadellidae)

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Flexamia rubranura n. sp.

(Figs. 2, 2A, 2B)

In size and form resembling abbreviata but with short wings, distinct coloration and distinct genital characters. Length, 3-3.2 mm. Vertex one-third longer than width between eyes, twice as long as pronotum. Elytra short, covering only the first three or four abdominal segments.

Color.—Pale yellow to brown. A broad black wedge-shaped mark, composed largely of wide black transverse bars, extending from apex of vertex to claval area of the wings. A pair of black spots on pronotum behind the eyes and two pairs at about the middle of the wings. Abdomen with four longitudinal black lines, a proximal pair near middle extending almost to tip of abdomen and a broader stripe near outer margin either side, converging at tip of abdomen. Face and beneath dark brown to black. Male agreeing in color with female except that the posterior half of the pygofers are bright red and conspicuously exposed.

Genitalia.—Female last ventral segment almost truncate, middle third slightly produced and notched at middle forming a broad truncated or concavely rounded tooth either side, a black spot either side of middle. Male valve broadly triangular, plates gradually tapered to broadly rounded apices which are about one-half as wide as basal width, exceeded in length by bright red pygofers.

Described from a large series of male and female specimens collected in a prairie habitat from short grasses at Evergreen, Illinois, August 23, 1934, by Dr. H. H. Ross and the author. Holotype male and allotype female and male and female paratypes in Illinois Natural History Survey collection. Male and female paratypes in author's collection.

Flexamia surculus DeL. & Slees.

(Figs. 1, 1A, 1B)

Flexamia surculus DeL. & Slees. Anns. Ent. Soc. Amer. 22: 99, 1929.

Since this species was not illustrated at the time of the original description, the characters are shown on the accompanying plate.

Flexamia bidentata n. sp.

Form and general appearance of visendus but darker in color and with distinct male genitalia. Length, 3-3.3 mm.

Color.—Tawny marked with brown. Veins of elytra heavily infuscated.

Genitalia.—Female last ventral segment with large median tooth which is bifid at apex forming two sharp pointed teeth. Male plates very similar to viscodus, but a little broader at apex and more deeply notched on inner margin. Male pygofers without the braod conspicuous ventral flaps, which overlap in the case of viscodus. Male ocdagus with two terminal processes which are the size and type of those of viseodus.

Described from two male and one female specimens collected at Wellesley, Mass., October 6, 1920. Male holotype, female allotype and male paratype in author's collection.

Latulus occidentalis DeLong

(Fig. 3)

Latulus misellus var. occidentalis DeLong. Ohio State Univ. Bull. 2: 41, 1926.

This was described as a varietal form of *misellus* Ball, but recent study has indicated this is a distinct form with an excellent genital character. Since the genital character was not figured at the time of the description it is illustrated in the accompanying plate.

The posterior margin of the last ventral segment is distinctly and rather abruptly produced on the middle half and may be slightly concavely indented at the middle.

It is known only from specimens collected in Oregon.

Polyamia herbida n. sp.

(Figs. S, 8A, 8B)

Resembling weedi in form and coloration but more robust with blunter vertex, coloration more conspicuous and distinct genitalia. Length, $2.8\ 3\ \mathrm{mm}$.

Vertex bluntly angled, slightly longer on middle than width between

Color.—Vertex pale with a pair of black spots next occili and a pair of proximal oblique dashes just above apex. A dark band as in weedi between anterior margins of eyes and a brownish blotch on posterior portion of vertex, either side. Pronotum brown with five pale longitudinal stripes. Scutellum pale with a dark spot in each basal angle. Elytra brownish, veins mostly dark margined. Some of veins conspicuously milk white; inner vein of clavus, cross veins of outer clavus, basal cross vein between sectors, cross veins of corium and veins surrounding outer anteapical cell, white. Face dark, with pale arcs.

Genitalia.—Female last ventral segment roundedly produced, lobes of underlying segment conspicuous at either side. Male valve bluntly angularly produced, plates rapidly narrowed and produced in long attenuate apices.

Described from a series of five male and five female specimens collected from a sand prairie at Hanover, Illinois, July 10, 1934; one female collected from the same habitat at Thomson, Ill., July 8, 1934, and one female from Castle Rock, July 12, 1934, all taken by Dr. H. H. Ross and the author. Male holotype and female allotype from Hanover, Ill., and male and female paratypes in collection of Illinois State Natural History Survey. Male and female paratypes in author's collection.

Polyamia saxosa n. sp. (Figs. 5, 5A, 5B)

Resembling compactus in form and appearance but with distinct color and genitalia. Length, 2.5-2.7 mm.

Vertex bluntly angled, about as wide between eyes as median length. Color.—Vertex pale straw with a pair of brownish quadrate spots, one next either eye and a pair of pale orange triangular spots at apex, an interrupted brownish band between anterior margins of eyes and an area on posterior portion either side of middle, dark. Pronotum with dark spots on anterior portion. Scutellum pale with a brown spot at apex. Elytra straw to pale brown. Veins broadly white with brown areas on apical, costal and discal cells. Clavus white with two clongated cells brown.

Genitalia.—Female last ventral segment very short at side margins, then gradually sloping to broadly rounded posterior margin which is slightly indented either side of a median rounded lobe. Male valve triangularly produced, apex rounded. Plates long, tapering to acute tips.

Described from a series of eight male and female specimens collected July 11, 1934, by Dr. H. H. Ross and the author from short grasses growing on top of a high rock cliff which forms a part of the canyon wall at Apple River Canyon, Illinois. Holotype male and allotype female and male and female paratypes in Illinois State Natural History Survey Collection. Male and female paratypes in author's collection.

Polyamia grama n. sp. (Figs. 6, 6A)

Resembling caperatus in general form and coloration but shorter and more robust, veins heavily margined with brown and male plates longer. Length, 2.3 mm.

Vertex longer than basal width between the eyes, bluntly angled.

Color.—Vertex pale with a pair of large spots just back of apex. A heavy transverse black band, broken at the middle extending between anterior margins of the eyes. A portion of this arising at outer end extends anteriorly surrounding the ocellus. Posterior half of vertex darker. Pronotum dark, marked with heavy black spots on anterior half. Elytra pale brown, veins lighter, margined with heavy brown infuscations. Elytra appearing longitudinally striped. Face with a heavy curved marginal band just below vertex extending down either side of face and arcs on face, dark brown. Beneath dark brown or black.

Genitalia.—Male valve broadly triangular, plates rather broad at base, then rapidly narrowed to narrow finger-like portions which are greatly produced and acutely pointed at apices.

Described from two male specimens collected in Illinois. One male specimen was taken September 16, 1930, by the author at Chicago and the other was collected at Apple River Canyon State Park, August 27, 1934, by Dr. T. H. Frison and the author. Male holotype in author's collection, male paratype in collection of Illinois State Natural History Survey.

Laevicephalus amplecta n. sp.

(Figs. 7, 7A)

Resembling debilis in form and appearance, but with bluntly angled vertex and distinct genitalia. Length, 4 mm.

Vertex bluntly angled, wider between eyes than length at middle. Vertex equalling pronotum in length.

Color.—Pale green washed with yellow. Vertex usually yellow, unmarked. Veins of wing rather conspicuous. Face marked with dark arcs.

Genitalia.—Female last ventral segment narrower than preceding segment and produced from base in a strongly convexly curved semi-circular segment. A conspicuous brown spot either side of ovipositor on posterior margin of segment. The underlying membrane showing conspicuously at either side.

Described from four female specimens from Santa Clara County, Calif., collected April, 1926. Holotype female and female paratypes in author's collection.

Laevicephalus shingwauki Beamer and Tuthill (Fig. 4)

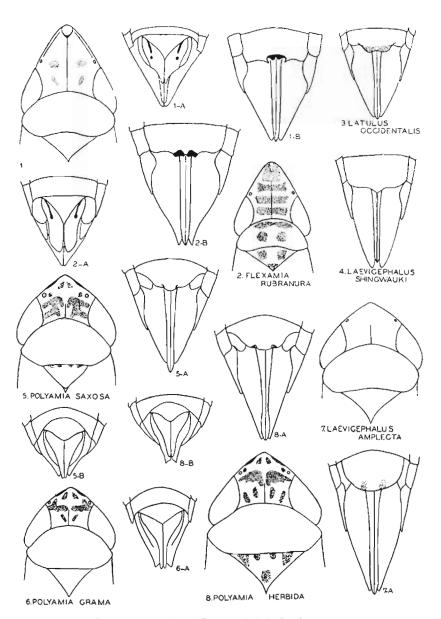
Laevicephalus shingwauki Beam. & Tut. Jour. Kans. Ent. Soc. 7: 19, 1934.

This species was recently described from two male specimens collected in southern Minnesota. During the past season it was collected in great abundance in northern Illinois and was one of the most abundant species in the fresh water marsh,

which habitat was quite dry during the past season. The description of the female is given below.

The color is quite variable but the two black spots on the abdomen are always less conspicuous in the female than in the male. Female last ventral segment with lateral angles rounded to posterior margin which is produced at middle into a broad tooth

Female allotype and parallotypes in collection of Illinois Natural History Survey. Parallotypes in author's collection.



Some new species of Deltocephaloid Leafhoppers.