Six New Species of Typhlocyba from the United States. (Homoptera: Cicadellidae).

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Typhlocyba surda n. sp. (Figs. 1, 1a, 1b).

Closely related to T. unca and T. piscator but with distinct

genitalia. Length 3 mm.

Color yellow. Wings rather heavily marked with yellow and opaque to cross veins. Marked with pale brown both anterior to and posterior to cross veins. There are three dark brown spots on the margin. One where the first cross vein joins the costa and one where each of the inner and outer apical veins touch the margin. The intensity of the dusky areas along the cross veins will vary in different specimens.

Male style sickle-shaped at apex and thickened abruptly near

apex so the entire apical portion is enlarged. Oedagus with a pair of long processes arising near base and extending caudally. From the main stem of the oedagus near its apex, which is curved anteriorly, a pair of posterior and a single anterior process arise which extend dorsally. The anterior process is bifurcate at apex and curves posteriorly between the posterior pair at their apices.

Described from a series of one male and five female specimens collected at North East. Pennsylvania, July 12, 1918, and July 18 and August 12, 1919, by the senior author. *Holotype* male, *allotype* female and female *paratypes* in collection of the senior author.

Typhlocyba crassa n. sp. (Figs. 2, 2a).

Resembling pomaria and athene in appearance but with distinct genitalia. Length 4 mm.

Pale vellow without definite color markings.

Male styles simple, strongly curved dorsally and gradually tapered to acute apices. Oedagus enlarged at base, anterior portion rather short, and fused. Posterior portion composed of paired proximal processes which are long, convexly rounded, curving anteriorly over anterior portion of oedagus. These are decidedly thickened at middle then tapered to long whip-like apices. A shorter process arises between these at base and extends about two-thirds the length of the posterior processes. Ninth segment of abdomen broadly rounded dorsally, a broad, heavy chitinous ridge along posterior margin which forms a black pointed toothed ventral posterior angle which protrudes beyond the ventral margin of the segment.

Described from a series of five specimens, one male and four females collected in the Hartstown Bog, Hartstown, Pennsylvania, June 16 and Sept. 30, 1919, by Mrs. DeLong and the senior author. *Holotype* male, *allotype* female and *paratype* females in collection of the senior author.

Typhlocyba quadrata n. sp. (Figs. 3, 3a, 3b).

Closely related to danae and eurydice but with distinct male genitalia. Length 3.5 mm.

Color pale yellow, apices of wings smoky. A band composed of three brown spots on either side just before cross veins. These are located between the sectors and there is none on the first or costal portion.

Male styles simple, rather long and curved. Oedagus in ventral view branched at base, processes strongly convexly curved until they become proximal then abruptly bent extending ven-

trally and tapered. The ninth segment of the abdomen is tapered to a curved somewhat infolded posterior margin. The inner side has a strongly produced spine-like portion dorsally, the margin is almost straight, set with three spines to the ventral edge where another sharp spine extends caudally.

Described from a single male specimen collected at Kane, Pennsylvania, August 19, 1928, by the senior author. *Holotype* male in collection of the senior author.

Typhlocyba surcula n. sp. (Figs. 4, 4a, 4b).

Apparently closely related to *pomaria* but with distinct male genitalia. Length 3.5 mm.

Color white without definite markings.

Male styles broad at base but abruptly narrowed near base and produced to recurved rather hooked apices. Oedagus with a short broad posterio-ventral portion which appears bifurcate. Posterior portion consisting of a rather heavy anterior process which is curved caudally at apex and extending between the longer paired posterior processes. The posterior margin of the ninth abdominal segment is unique in having a long caudally posteriorly directed spine on the dorsal curved portion of the segment. The spine is broad at base and sharply pointed at apex. The heavy chitinous ridge along the posterior margin protruding slightly at ventral end giving a slight indication of a spine.

Described from four male specimens collected at Wisconsin Rapids and Cramoor, Wisconsin, July 27, 1931. *Holotype* male and *paratype* males in collection of the senior author. **Typhlocyba enascora** n. sp. (Figs. 5, 5a).

Resembling *xanthippc* in size and form but with distinct male genitalia. Length 3.5 mm.

Color pale vellowish white without definite markings.

Male styles simple, gradually tapered to acute tips. Oedagus dorsally curved anteriorly, an anterior process arising from the concavity at about half its length and directed ameriorly. This process is about two-thirds the length of oedagus. Tip of oedagus with two pairs of processes. The pieces of one pair are proximal, directed anteriorly and curved upward on distal half. The other pair are shorter curving outwardly on each side and in lateral view appear as a prolongation of the main body of the oedagus.

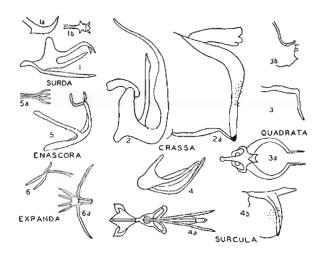
Described from a single male collected at Idaho Falls, IDAHO, July 27, 1930, by the senior author. Male *holotype* in collection of senior author.

Typhlocyba expanda n. sp. (Figs. 6, 6a).

Closely related to xanthippe and ariadne but with distinct male genitalia. Length 4.5 mm.

Color white, vertex and pronotum slightly tinged with yellow, elytra milky white.

Male oedagus resembling *cnascora* in general form but with six long spines at apex. Four of these are directed anteriorly and in dorsal view appear widely separated. In lateral view two curve more ventrally than the other two. The remaining two of the six processes are directed laterally and are longer than the anterior processes. Female segment rather strongly produced, apex bluntly rounded.



Explanation of Text Figures.

 Surda—lateral view of oedagus, la—foot of style. lb—dorsal view of oedagus—main shaft.

Crassa—lateral view of ocdagus. 2a—lateral view of 9th segment.
Quadrata—lateral view of lateral process of ocdagus. 3a—ventral view of ocdagus. 3b—upper posterior margin of 9th segment (inner side).

4. Surcula—lateral view of oedagus, 4a—ventral view of oedagus-4b—lateral view posterior margin of 9th segment.

Enascora—lateral view of oedagus. 5a—ventral view of oedagus.
Expanda—lateral view, tip of oedagus. 6a—ventral view, tip of oedagus.

Described from a male and two female specimens collected at Estes Park, Colorado, August 21 and 25, 1920, collected by Prof. H. C. Severin at an altitude of 8500 to 9350 feet. *Holotype* male, *allotype* female and female paratype in collection of senior author.

572