

FOUR NEW SPECIES OF MEXICAN *CICADELLA*
(HOMOPTERA: CICADELLIDAE)

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Collections of Mexican leafhoppers to date have shown only four species which seem to belong to the genus *Cicadella* and all are apparently new species. One of these, *cordoba*, resembles superficially the European *vittata* Linn. The other species, *scarlatina*, *circula* and *cochlea*, have elytra which are indented at the apices somewhat like *stellulata* (Burm.) but are otherwise quite different. Because of this wing condition combined with a flattened body and an elongate produced flattened head, they may even be ranked as a subgenus of *Cicadella* and the name *Scinda* is proposed with *scarlatina* as the type.

Cicadella cordoba n. sp.

Figure 1

Resembling *vittata* Linn. in form and appearance but with different coloration and distinct male genitalia. Length 3.5-3.75 mm.

Vertex produced, blunt, rounded at apex, longer in female than in male. Median length in female about three-fourths and in male about one-half as long as the basal width between the eyes.

Color mostly dark brown or smoky, marked with pale spots. Vertex with basal portion usually brown or smoky, apical portion paler. Face pale, some shade of yellow. Pronotum and scutellum usually dark brown unmarked. Elytra brown or smoky with a small pale spot on commissure just beyond middle of clavus and another spot just posterior to apex of claval vein. A large pale spot is on the costal margin and is crossed about two-thirds its length by the outer anteapical cross vein which is brown in color.

Genitalia: Female seventh sternite with a strongly produced posterior margin forming a bluntly pointed apex. Male plates long and rather slender, the apical half narrow. Styles slender, elongate, the apical portion broadened to form a foot-like portion with the pointed toe turned outwardly. Male aedeagus erect with a broad erect anterior portion and a slender erect aedeagus shaft which bears a pair of rather long slender terminal fingerlike processes. The pygofer bears a long, tapered caudal spine on the basal margin.

Holotype male, allotype female and male and female paratypes collected at Cordoba, Veracruz, Mexico, November 20, 1924, by Dr. Dampf. These were swept from ferns in shade in the Barranca of the Rio San Anton.

Cicadella scarlatina n. sp.

Figure 2

A flattened leafhopper with a wing venation like *stellulata* (Burm.) with a flattened, produced head, distinct coloration and genitalia. Length 4 mm.

Vertex bluntly angled, dorsoventrally flattened, median length about three-fourths the basal width between the eyes. Elytra with a rounded notch at about the middle of the apical portion. Head and body decidedly depressed, dorsoventrally flattened.

Color yellowish marked with red and brown. Vertex yellowish with a narrow brown line above margin of vertex extending along margin between eyes. Pronotum with the anterior half reddish, the posterior half pale. Elytra and scutellum marked with concentric circular reddish bands. A red band extends from base of elytra on either side across basal half of scutellum. Another reddish band extends from about the middle of corium on each side diagonally forward across the clavus just posterior to the scutellum. The apical third of clavus is red, forming an

ovate spot when the elytra are folded together. The area surrounding this reddish spot is white. The apical portion posterior to clavus is infuscated or smoky, the veins are orange red. Face with a black line extending between eyes above antennae. Face yellow below this line and white above.

Genitalia: Female seventh sternite with the lateral margins rather strongly produced, posterior margin concavely sloping each side to form a median produced, blunt, lobe-like apex. Male plates elongate, styles long and slender with a broadened, foot-like apex, the outer margin pointed. Aedeagus composed of three erect processes. The median process is broad and serrate at apex. The posterior process is formed by the aedeagus shaft bending back upon itself at apex and curving anteriorly and dorsally to form the longest of the three processes. In caudal view the apical blade of this process is broadened then tapers to a pointed apex. The pygofer bears a short, erect, caudal spine on the caudodorsal margin just beneath the anal tube.

Holotype male and allotype females collected at Lagunas de Cimpaola, Mor, Mexico, October 4, 1941, paratype males collected at Orizaba, Veracruz, October 17, 1941, by DeLong, Caldwell, Good and Plummer. Paratype female collected at Laguna de Zempoala Mor, October 21, 1945, by Plummer, DeLong, Hershberger and Elliott.

Cicadella circula n. sp.

Figure 4

Superficially resembling *scarlatina* but with distinct coloration and genitalia. Length, male, 3 mm.

Vertex produced, blunt at apex, one-fourth wider between eyes at base than the median length.

Color: White marked with red. Vertex white with a pair of black, elongate, diagonal dashes at apex and a rather narrow, broken reddish, transverse band between the anterior margins of the eyes. Pronotum banded. The anterior half is red, the posterior half is white. There is a transverse white spot at middle just back of vertex and the central half of the white area extends forward into the red area on the posterior portion. Basal portions of scutellum and basal portion of elytra red, due to a transverse band which curves posteriorly on caudal margin and reaches the costa at one-third its length. Posterior half of claval vein broadly red, joined to a broad red transverse band which extends across clavus at about its middle and another just before apex of clavus. These form a round white spot on commissure just behind middle of clavus. There is a diagonal black mark on costa just beyond middle which is directed caudally. The apical third of the elytra embrowned with a few white areas. Face white with a pair of black spots just above antennae and a spot either side next the base of each eye on the inner margin.

Genitalia: Male plates with a pointed, twisted spine like apex. Styles rather narrow, elongate, foot-like, the toe pointed outwardly. Aedeagus rather short, produced dorsally at base then tapered to a curved portion which bends ventrally then back upon itself, forming a long, slender blade like apical whip which extends almost to the dorsal wall of the pygofer chamber.

Holotype male collected at Necaxa, Pue, October 27, 1945, by Stone, DeLong, Hershberger and Elliott.

Cicadella cochlea n. sp.

Figure 3

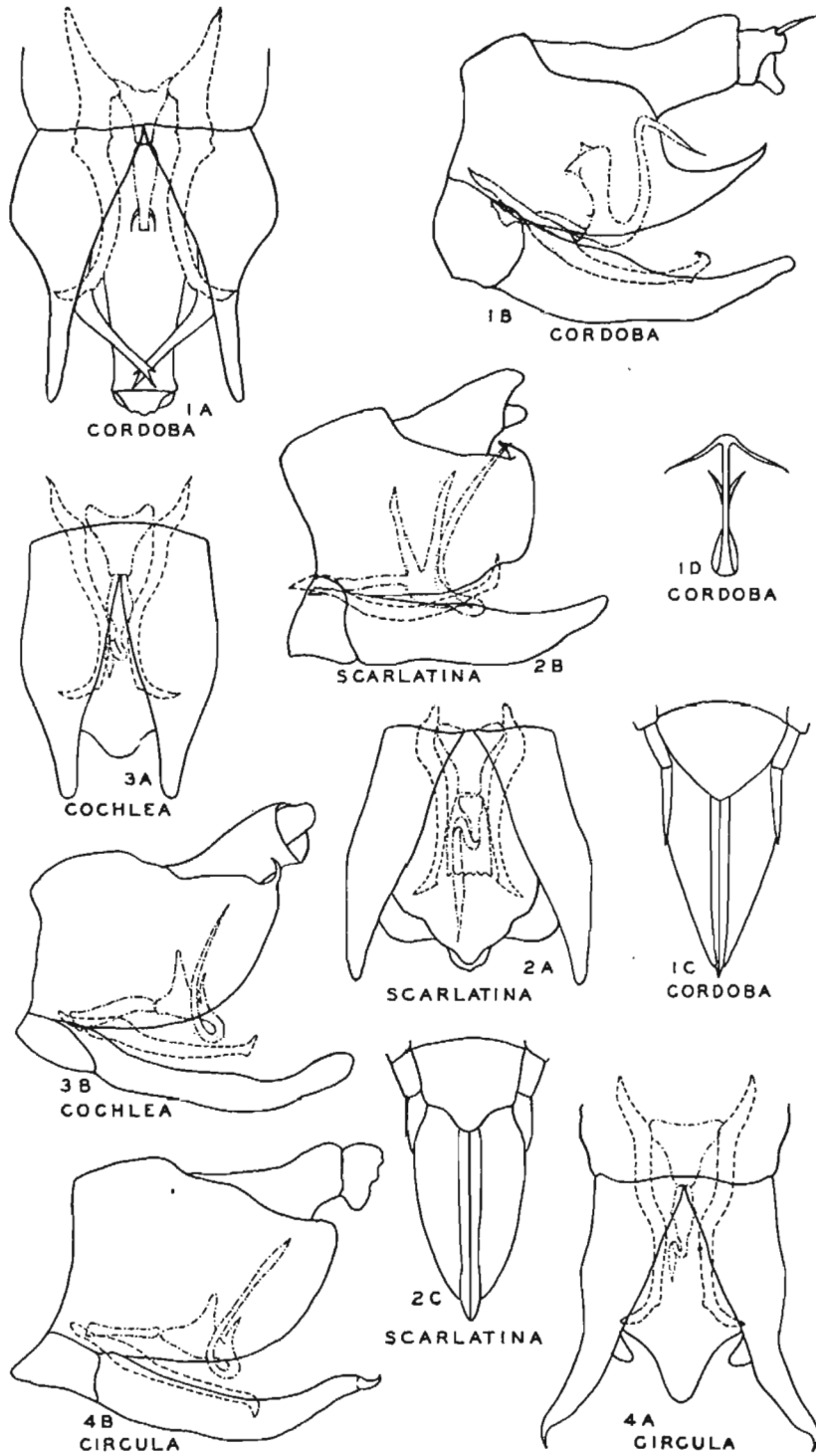
Resembling *circula* in form but with distinct coloration and male genitalia. Length 3 mm.

Vertex bluntly produced, almost one-fourth wider between eyes at base than median length.

Color: White, vertex and face without specific dark markings. Pronotum white with a dark

EXPLANATION OF PLATE

- 1A. *Cicadella cordoba*, ventral view male genitalia; 1B—lateral view of male genitalia; 1C—ventral view of female caudal portion of abdomen; 1D—caudal view of male aedeagus.
 2A. *Cicadella scarlatina*, ventral view of male genitalia; 2B—lateral view of male genitalia;
 2C—ventral view of female caudal portion of abdomen.
 3A. *Cicadella cochlea*, ventral view of male genitalia; 3B—lateral view of male genitalia.
 4A. *Cicadella circula*, ventral view of male genitalia; 4B—lateral view of male genitalia.



brown band on posterior portion, the front margin of which curves forward to the anterior margin at about the middle of each eye. The brown band covers the basal half of the scutellum and the basal tips of the elytra. With this exception, the elytra are white on the basal half and dark brown to black on the apical half with white areas between the apical veins. Veins yellow, apical veins black.

Genitalia: Male plates tapered and bluntly rounded at apex. Styles elongate, narrow, foot-shaped at apex with a pointed toe extending outwardly. Pygofer with a narrow, curved spine extending dorsally and anteriorly from the caudodorsal extremity. Aedeagus similar to *circula* with a dorsally produced basal portion beyond which the aedeagus is narrowed to form a produced anterior portion which is ventrally curved, then is recurved to form a dorsal, apical whip which is long and slender. A spine arises at about the middle on the dorsal margin of the aedeagus shaft.

Holotype male collected at Necaxa, Pue, October 27, 1945, by Stone, DeLong, Elliott and Hershberger.