A NEW GENUS—STONEANA—AND THREE NEW SPECIES OF MEXICAN LEAFHOPPERS

(Homoptera: Cicadellidae)

 $\mathbf{B}\mathbf{Y}$

DWIGHT M. DELONG

Reprinted from

Annals of the Entomological Society of America

Vol. XXXVI, No. 3, September, 1943

A NEW GENUS—STONEANA—AND THREE NEW SPECIES OF MEXICAN LEAFHOPPERS

(Homoptera: Cicadellidae)

DWIGHT M. DELONG, Ohio State University, Columbus, Ohio

In 1936, Dr. E. D. Ball in company with Mr. W. E. Stone who is with the U. S. Bureau of Entomology and Plant Quarantine stationed in Mexico City, collected several species of Mexican leafhoppers. A very interesting species collected at that time was apparently not described and does not belong to a known genus. Dr. Ball had, therefore, planned before becoming seriously ill to name the genus for Mr. Stone and the species for Mrs. Stone and their daughter, both of whom have the given name Martha. Since Dr. Ball has not recovered and will probably not again be able to carry on his taxonomic studies, and since I have been working over a large amount of Mexican material, I am happy to name both the genus and species as he had planned and also in honor of my good friends, the three members of the Stone family.

Genus Stoneana nov.

Closely related to *Aligia*. The vertex is conspicuously depressed just behind the margin, causing the apex, in lateral view, to appear as a dorsally produced ridge. The margin is not sharp, the face extending to the top of the marginal ridge. The vertex is short and broad as in *Aligia*. The elytra contains the two cross veins and many supernumerary cross veins especially on the clavus, costa and first anteapical cell.

Genotype Stoneana marthae, n. sp.

Stoneana marthae, new species

A white to pale yellow species with orange and black markings. Length 4.5 to 5 mm.

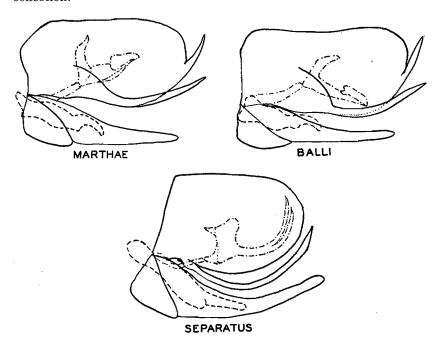
Vertex short, rather broadly roundedly produced, and appearing almost parallel-margined, twice as broad as median length.

Color.—White to yellow, vertex with a pair of proximal angular black spots at apex, and a smaller one next to the eye on either side just below ocellus. Disc usually orange. Pronotum mostly orange with a median longitudinal white stripe, an oblique spot on either side, and a white spot behind each eye near lateral margin. Pronotum pale with darker basal angles and a black angular spot on either side of apex. Elytra white with orange veins, crossveins and orange blotches, giving the elytra the appearance of being spotted with white. Face white.

Genitalia.—Last ventral segment of female with produced lateral angles, between which the posterior margin is broadly and rather deeply concavely excavated on either side of a broad medially pro-

duced tooth which is slightly notched at apex. Male valve broad and rounded, plates long, triangular. Aedeagus L-shaped with a basal erect portion and the thickest and largest portion extending caudally. The apical half is sloped upwards on the ventral side to form a narrow blunt apex, just anterior to which is a short angled wing-like projection on either side. The ventral portion of the pygofer gives rise to a long black spine at about half its length which extends to the tip of pygofer. Also, a short black pointed spine arises on the ventral caudal margin of the pygofer and extends a little farther than the basal spines.

Holotype male, allotype female and male and female paratypes collected on the Cuernavaca-Acapulco Road, August 29, 1936, by Ball and Stone. Holotype male, allotype female and male and female paratypes in Ball's collection. Paratype male and female in author's collection.



Stoneana balli, new species

In form and general appearance resembling marthae, but with darker coloration and slightly different male genitalia. Length 4.5 mm.

Vertex broadly rounded, less than twice as wide between eyes at base as median length.

Color.—Vertex pale yellow, with a broad, angular orange spot on either side on basal two-thirds. Each spot extends from eye to middle in front and tapers to about the middle on either side at base having a white spot at middle and an angular white spot next the base of either eye. Margin with a large angular black spot on either side of apex. A small round black spot just above each ocellus and a pair of black spots next to each eye. The ventral spot below the margin is the larger. Face yellow with pale brown arcs on either side of middle. Pronotum dark brown with five pale spots across middle. Scutellum brownish with apical third paler, a black angular spot on either side of apex. Elytra whitish subhyaline, veins dark brown and with paler brown mottling on clavus and disc.

Genitalia.—Male valve rather short, broad, and rounded at apex. Plates elongate, triangular. Aedeagus L-shaped as in marthae with a basal erect portion and a thicker caudal portion which bears a rather conspicuous wing-like process on either side of the apical half just before the blunt, rounded apex. As in the case of marthae, a long black spine arises at about the middle of the pygofer on ventral margin and extends to its apex. Also a short black spine arises on the apical ventral portion of the pygofer and is directed almost dorsally. The apical spine in this species is heavier than the same spine in marthae.

Holotype male and paratype male collected on the Cuernavaca-Acapulco Road, August 23 and 24, by Ball and Stone. Paratype males collected at Jacala, Hgo., Mexico, August 13, 1936, by Dr. E. D. Ball. Holotype and paratypes in Ball collection. Paratype male in author's collection.

Stoneana separatus, new species

Resembling balli in form and color but with distinct male genitalia. Length 5 mm.

Vertex more produced than in *balli*, but rounded at apex, more than half as long at middle as basal width between the eyes.

Color.—Vertex white with a broad orange spot on either side between anterior margins of the eyes which tapers to a narrow spot at base. Margin with a large black spot on either side of apex, a smaller spot just above each ocellus, and a black spot next to eye just below each ocellus. Face pale with light brown arcs and coloration on either side of middle. Pronotum orange brown with four large white spots across middle and a longitudinal pale stripe. Scutellum pale with brownish basal angles and tinted with orange on middle and a black angular spot on either side of apex. Elytra white with dark brown veins and brownish mottling especially on clavus.

Genitalia.—Male valve very short, almost transverse. Plates elongate, triangular, rather broad at base, tapered to narrow blunt apices. Aedeagus with a rather broad basal portion which appears square and extends dorsally. At the base of this portion a narrow process extends caudally then curves dorsally, the apical half of which, extending from about the beginning of the curved portion, is cleft, forming two slightly separated pieces. The pygofer bears only one spine which arises near the base on the ventral margin and extends almost to the apex of pygofer.

Holotype male and paratype male collected at Yetia, Gro., Mexico, August 11, 1930 (M. F. 1756) by J. Parra. Holotype and paratype in author's collection.