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THE GENUS FLEXAMIA (HOMOPTERA, CICADELLIDAE) IN MEXICO.

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The Genus Flexamia was erected by DeLong¹ in 1926 to include those species of the Deltocephaloid group which have strongly reflexed veins on the apical portion of the costal margin of the first pair of wings. Deltocephalus reflexus O. and B. was cited as the genotype. Some 27 species have been described for the United States and are recognized as distinct. No previous records have been published for Mexican species, three of which are treated at this time, all new. From field collecting in many states in Mexico it is apparent that the species of this genus are not as common nor abundant as they are in the United States. They occur upon grasses of various types, more especially prairie grasses, and are common in grazing areas.

The three species seem to be distributed in different areas as regards ecological factors. *F. mexicana*, a large and conspicuous species, has been taken in abundance at Iguala, Gro., on grasses of the semi-desert at an elevation of 2300 feet. *F. zamora*, a medium sized species, was taken from grasses on the high plateau at Zamora, Mich., at an elevation of 5600 feet. *F. minima*, a small species was collected in the low hot country at Valles, S. L. P., from grasses in the tropical area at an elevation of 300 feet.

Flexamia mexicana n. sp.

A large species, in general appearance somewhat resembling *albidus* but much longer and with distinct genitalia. Length 5.5-6 mm.

Vertex flat, strongly produced and bluntly pointed at the apex about two thirds as wide between eyes at base as median length. The vertex is one third longer than the pronotum.

Color: Vertex creamy white with a conspicuous dark marginal spot either side of apex. There is a transverse dark band not extending to the margin on anterior portion, about one fourth the distance from apex to base. There are six dark longitudinal bands extending across pronotum. The central pair arise on the posterior portion of the vertex and extend across the scutellum. The elytra are milky white subhyaline and the veins are margined with dark brown. The broadest marks are on the disc. The apical and costal cells are tinted with pale brown.

Genitalia: Female last ventral segment broadened apically. The lateral margins strongly produced to form long narrow pointed lateral angles between which the posterior margin is broadly, deeply excavated and forms a slightly produced lobe either side of middle. Male plates long and broad, rather broadly rounded on apices. Styles rather short, gradually narrowed to two-thirds their length where they are abruptly narrowed to form finger-like apices which are pointed on outer margin of apex. The aedeagus is composed of a narrow basal process which curves ventrally beneath a broad dorsal process. The dorsal portion curves ventrally near base then extends caudally, is broadened, flattened and is impressed medially on the ventral side. The pygofers are produced laterally to form a process each side which bears a long curved, broadened, spear-like spine which is margined with coarse hairs.

Holotype male, allotype female and male and female paratypes collected at Iguala, Guerrero, Mexico, November 11, 1939 and October 25, 1941 by C. C. Plummer, E. E. Good and D. M. DeLong. Male paratype was collected at Atencinga, Puebla, 1930 (M. F. 1703) by Dr. Dampf.

Flexamia zamora n. sp.

Resembling reflexa in general appearance but with distinct genitalia. Length 3.5-4 mm.

Vertex produced and bluntly pointed three fourths as wide between eyes at base as median length.

Color: Vertex cream with a dark circular spot around apex and a pale brown transverse dash on either side at about the middle. Pronotum cream with scattered longitudinal brownish markings. Elytra cream subhyaline, a dark brown spot on disc, the costal veinlets heavily margined with dark brown. The veins on the posterior portion narrowly brown margined. Face black above, pale brown on lower portion.

Genitalia: Female last ventral segment with posterior margin broadly shallowly emarginate with a set of four produced black teeth at middle. Each side of a median notch there is a narrow produced rounded lobe separated from a pointed produced tooth by a narrow V-shaped notch. Male plates with outer margins straight to about two thirds their length where they are rapidly narrowed by a sloping margin to blunt apices which are separated by a notch formed by the inner apical concave margins. Styles decidedly narrowed on apical

half, the apices are long, narrow, finger-like and directed outwardly. The aedeagus is rather short, slender, tapered to a pointed attenuated apex and directed caudally and dorsally. There is a basal portion which extends dorsally and is enlarged and bears a horizonal portion on its dorsal margin.

Holotype male, allotype female and male and female paratypes collected at Zamora, Michoacan, Mexico, October 2, 1941 by Plummer, Good, Caldwell and DeLong.

Flexamia minima n. sp.

Resembling zamora in general appearance but smaller and with different male styles. Length, male 3 mm.

Vertex produced and bluntly angled about one fourth longer at middle than basal width between the eyes.

Color: Vertex cream with a dark brown circular mark enclosing apex. Pronotum with a short longitudinal dark brown band behind each eye near lateral margin. Scutellum unmarked. Elytra creamy white with two small brown marks near base, just back of claval suture. A dark brown spot on disc and costal veinlets conspicuously brown margined. A dark brown spot on first apical cell. Upper portion of face dark brown with pale arcs. Lower portion of face yellowish.

Genitalia: Male plates rather short, strongly sloping from base and curved convexly then slightly concavely to form blunt pointed apices which are separated by a V-shaped notch formed by the oblique slope of the inner apical portion. The styles are elongate narrowed on apical half, curved outwardly at apex and bluntly pointed. The aedeagus in lateral view is short, broadened at base with a dorsally produced process and narrowed on ventral portion to form a rather long, curved slender process which curves dorsally on apical half. The pygofer is produced into a divergent wing-like structure on each side at apex.

Holotype male collected at Valles, S. L. P., Mexico, December 1, 1938 by J. S. Caldwell.

EXPLANATION OF PLATE III

Dorsal view of heads; ventral view of last ventral female segment (marked \mathfrak{P}); and ventral and lateral views of male genitalia of species as labeled.

