

**SOME NEW SPECIES OF MEXICAN ALCONEURA
(HOMOPTERA—CICADELLIDAE).**

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The Genus *Alconeura* was erected by Ball and DeLong¹ in 1925 at which time five species were referred to that group and *rotundata* Ball and DeLong was cited as the genotype. Since that time two species were described by Lawson² in 1930, two by Beamer³ in 1934, nine by Griffith⁴ in 1938, when he reviewed the genus, and one by Knull⁵ in 1945. Twenty-one species are now listed as belonging to this genus for the United States. The larger number of species has been described from the southwestern United States and the range of some of these extends into portions of Mexico. An examination of the Mexican material has revealed several new species; six of which are being named at this time. The types of all species described are in the DeLong collection.

***Alconeura languida* n. sp.**

Figs. 1a, 1c, 1e, 1f.

Resembling *planata* Ball and DeLong in general form and coloration, but with distinct genitalia. Length 2.8 mm.

Vertex produced, bluntly angled in female, more rounded in male, median length almost as long as basal width between the eyes in the female, median length about two-thirds as long as the basal width between the eyes in the male.

¹ Ball, E. D. and DeLong, D. M. 1925. *Ann. Ent. Soc. Amer.* 18: 334-340.

² Lawson, P. B. 1930. *Bull. Brooklyn Ent. Soc.* 25: 44-46.

³ Beamer, R. H. 1934. *Can. Ent.* 66: 16-18.

⁴ Griffith, M. E. 1938. *Univ. Kansas Sci. Bull.* 24: 309-340.

⁵ Knull, D. J. 1945. *Ohio Jour. Sci.* 45: 103.

Color: Vertex pale tan, with the margin and a narrow, median, longitudinal vitta white. Pronotum olive-green, margins broadly bordered with light tan. Scutellum orange-brown, the basal angles bordered with white. Elytra olive-green with the apices pale and with a round black spot in the base of the fourth apical cell. Face light and unmarked.

Genitalia: Female seventh sternite with the lateral angles of the posterior margins narrowed, the median half produced as a broad rounded lobe which is slightly, roundedly notched at the middle. Male aedeagus thick, heavy at the base, almost square; dorsal processes of the base short, erect, and prominent; a pair of dorso-lateral processes arise on the base proximal to the phallicata, paralleling the phallicata for two-thirds of its length; the phallicata erect, about one-half as wide as long, its apex broadly rounded, the posterior margin thickened to resemble a process for about two-thirds of the length of the phallicata. The apex of the style blunt, the outer margin of the style convex in ventral view. The pygofer hook long, thin, and sharply pointed, arising on the dorso-caudal margin of the pygofer, directed caudo-ventrally and curving outwardly.

Holotype male, allotype female, male and female paratypes collected at Acapulco, G'ro., Sept. 10, 1939, by DeLong and Plummer; male and female paratypes collected at Iguala, G'ro., Sept. 11, 1939, by D. M. DeLong; male paratypes collected at Zincauro, G'ro., Sept. 2, 1930, (M.F. 1789) and, Cutzmala, G'ro., Aug. 20, 1930, (M.F. 1768) by J. Parra; male paratype collected at Huetamo, Mich., Aug. 22, 1933, (M.F. 3100) and a female paratype collected at Joiulla, Mor., Oct. 2, 1937, (M.B. 3912) by Dr. Dampf.

***Alconeura separata* n. sp.**

Figs. 2a, 2b, 2c, 2f.

A unique species which is stouter than the other described species of *Alconeura* and which superficially resembles a species of *Protalebra*. Length 3 mm.

The vertex is produced, bluntly angled, and the median length is about equal to the basal width between the eyes in the female while somewhat shorter in the male. The head, including the eyes, is subequal in width to the pronotum, and the face in lateral view recedes sharply below the eyes.

Color: The vertex and pronotum cream marked along each side with a reddish-orange area which covers all but the posterior margin and a broad median region of the pronotum and which extends onto the vertex as a broad rectangular area next to each eye; a

small stripe on the pronotum next to the posterior corner of each eye orange-red. The face is cream, unmarked. The scutellum is orange-red with the basal angles outlined with cream. The elytra are white with a broad transverse stripe on the proximal quarter of the clavus, a broad stripe extending transversely from the proximal third of the costal margin to the middle of the claval suture, and a broad stripe extending from the middle of the costal margin to the apex of the clavus, orange-red; the cross veins and the veins of the first two apical cells are bordered with fuscous.

Genitalia: The female seventh sternite has the posterior margin concavely then convexly rounded to form a produced lobe which is rounded at the apex. The base of the aedeagus of the male is long, straight, and erect; the dorsal processes of the base are long, thin, and prominent, the phallicata is as long as the base, and curves slightly toward the dorsum, narrowing to one-third its basal width at its rounded apex; a pair of deflected, diverging, processes about one-third the length of the phallicata arise laterally at the apex of the phallicata. The styles in ventral view are bulbous near the tip, the apex is produced to form a long pointed process, and the outer margin of the distal portion bears a row of long hairs. The pygofer hooks are thick and heavy; they divide near the apex into sharply pointed dorsal and ventral processes, the dorsal process is directed caudally while the ventral process is directed ventro-caudally.

Holotype male and allotype female collected at Iguala, G'ro., Oct. 25, 1941, by DeLong and Good; female paratypes collected by the same collectors at Chilpancingo, G'ro., Oct. 25, 1941.

***Alconeura rubranota* n. sp.**

Figs. 3a, 3b, 3c.

A rather unique species resembling *rotundata* Ball and DeLong in general form but differing in coloration and genitalia. Length 3 mm.

The vertex of the male produced with the anterior margin rounded and with the median length about as long as the basal width between the eyes.

Color: The vertex cream, with paired, adjacent spots on the anterior and posterior portions of the vertex and spots on the inner margin of each eye orange-brown. The pronotum light cream, with a broad, darker band on the anterior margin, and a pair of median spots on the band golden brown. There are a pair of light orange spots on the disk and a small, light orange stripe near each lateral angle. The scutellum light tan with the basal angles and

apex slightly darker. The elytra white translucent, with a pair of spots on the clavus, three spots along the second sector, and a spot on the first sector, orange; the cross veins and the veins of the apical cells bordered with fuscous; a large, round, black spot in the corner of the fourth apical cell.

Genitalia: The base of the aedeagus is bent dorsally near its center, the horizontal proximal portion swollen and the vertical distal portion cylindrical; the dorsal processes of the base are reduced to slight knobs; a ventral process arises at the bend of the base and curves dorsally, this process is about as long as the base; the phallicata is long, slender, and sickle-shaped (concave anteriorly) and tapers gradually to a blunt apex. The distal portion of the style in ventral view is narrowed rapidly to a pointed apex, with its lateral margins convex, and with a fringe of long hairs arising on the lateral margins. The pygofer hooks arise on the median interior surface of the pygofer and are divided near their bases into dorsal and ventral processes which are subequal in length; the dorsal processes thicker at the base than the ventral processes.

Holotype male collected at Finca Prusia, Chiapis, Nov. 4, 1932, M.F. 2846, by Dr. Dampf.

***Alconeura cinctella* n. sp.**

Figs. 4a, 4b, 4c, 4d, 4f.

Resembling *separata* in general form and appearance but with the face in lateral view not so decidedly receding; the coloration and genitalia distinctive. Length 3 mm.

The vertex is produced, bluntly angled, and with the median length about equal to the basal width between the eyes in the female, but somewhat shorter in the male.

Color: The vertex is ivory and unmarked. The pronotum is white with the anterior margin and a pair of small, round spots on the disk, orange-red. Scutellum light yellow with the basal angles and apex orange. The elytra white, with a band at the base of the clavus, a broad stripe extending from the middle of the commissural suture across the clavus to the middle of the corium, and a small stripe on the proximal third of the costa, orange-red; a transverse stripe extending from the mid-costal margin to the apex of the clavus black; the area on the corium next to the apex of the clavus light orange; the apical veins bordered with fuscous. The color markings of the females are smaller and lighter than in the males.

Genitalia: The seventh sternite of the female with the median third strongly produced to a narrowly rounded apex. The base of

the male aedeagus short and thick; the dorsal processes of the base long, prominent, and reflexed at the apex; the pair of ventral processes of the base are long, thin and curve toward the dorsum, projecting for one-fourth of their length above the rest of the aedeagus; the phallicata thick, curving toward the dorsum and but little wider at the base than at its truncate apex; a pair of wing-like processes arise on the dorso-posterior margins at the apex of the phallicata, extend ventro-laterally and are about one-third the length of the phallicata. The apex of the style sharply rounded, its lateral margins in ventral view tapering toward the apex and bearing a row of long hairs on the outer margin. The pygofer hook bifid, with the dorsal and ventral processes widely separated, and about equal in length.

Holotype male, allotype female, and male and female paratypes collected at Iguala, G'ro., Sept. 11, 1939, by DeLong and Plummer; other male and female paratypes from Iguala, G'ro., October 25, 1941, (DeLong and Good). Paso de Vacas, G'ro., Sept. 3, 1930; Mezcala, G'ro., Aug. 4, 1930 (M.F. 1735); Arantichangus, G'ro., Aug. 31, 1930 (M.F. 1788); Pungarabato, G'ro., Aug. 22, 1930 (M.F. 1769); Tetela del Rio, Aug. 13, 1930, (M.F. 1757); P. de Ixtla, Mor., Aug. 30, 1930, (M.F. 1754) and Huetamo, Mich., Aug. 22, 1933, all collected by J. Parra. Paratypes from Chilpancingo, G'ro., October 25, 1941, by DeLong and Good.

***Alconeura rubella* n. sp.**

Figs. 5a, 5b, 5c, 5d.

Resembling *quadrinaculata* Lawson in general form, but differing in coloration and genitalia. Length 3 mm.

Vertex with the anterior margin of the male rounded, the median length about equal to the basal width between the eyes.

Color: The vertex is ivory, with a pair of median longitudinal vittae which fade out anteriorly and posteriorly, orange-brown, and with a pale tan spot near the inner margin of each eye. Pronotum cream, with paired, median and lateral, longitudinal vittae, dull orange. The median vittae fuse on the disk to form an enlarged spot. The scutellum cream with the basal angles and apex orange-brown. Elytra hyaline, with three spots along the clavus, an interrupted vitta which extends obliquely across the elytra from the humeral angle to the apex of the clavus, and a bar on the mid-costal region, orange. The cross veins and the veins of the first two apical cells are bordered with fuscous, a minute black spot is present in the base of the fourth apical cell.

Genitalia: The base of the aedeagus is bent nearly at right angles near its proximal end, the proximal portion broad and the erect distal portion cylindrical; a pair of long, slender ventral processes arise at the bend of the base, these curve dorsally near their bases and then extend straight dorsally exceeding the rest of the aedeagus by one-fourth of its length; the dorsal processes of the base are short and narrow; the phallicata curves gently dorsally, and tapers to one-half its basal width at the bluntly rounded apex. The apex of the style is pointed with the lateral margins of the distal portion, in ventral view, appearing almost straight. The pygofer hooks arise on the dorso-caudal angles of the pygofer, taper from a thick base to sharply pointed apices, which curve ventrally near their bases.

Holotype male collected at Vejuco, G'ro., Sept. 3, 1930, (M.F. 1790) by Dr. Dampf.

Alconeura similis n. sp.

Figs. 6a, 6c, 6e.

Resembling *tricolor* (Van Duzee) in general form and appearance but with distinct genitalia. Length 2.7 mm.

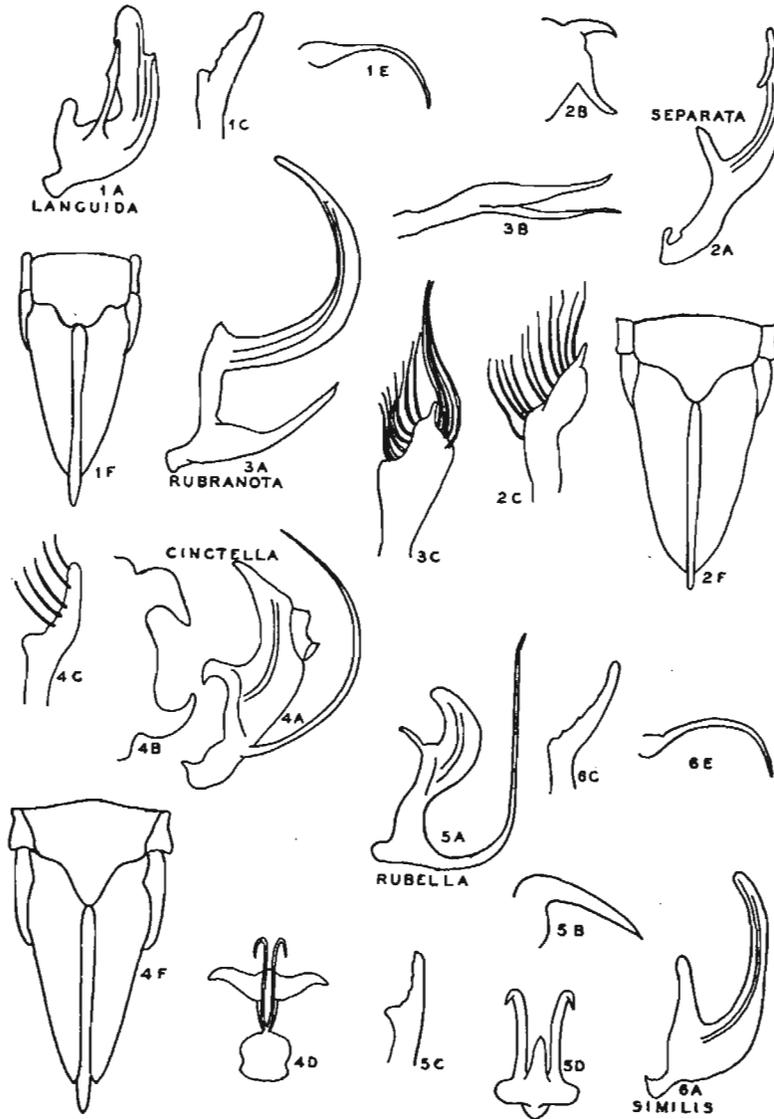
Vertex: Produced, bluntly angled, about as long as basal width between the eyes in the female, somewhat shorter in the male.

Color: Vertex orange-red, with the margin and median, longitudinal vittae white. Pronotum olive-green with the lateral angles and a median longitudinal vitta white, and with the anterior margin broadly bordered with orange-red. Scutellum orange in male, pale orange in female, basal angles bordered with white. Elytra olive-green with a row of pale spots on the clavus along the claval suture, scattered white spots on the clavus and corium. The tips of the longitudinal veins are white, and there is a round black spot in the corner of the fourth apical cell.

Genitalia: The base of the male aedeagus heavy and thick, its basal dorsal processes erect, long, and prominent; the phallicata erect, slightly curving dorsally and tapering from the base to its

EXPLANATION OF PLATE II

Genital structures of species of *Alconeura* as labeled. In each case the letter after the number denotes: A—the male aedeagus—lateral view, B—pygofer hook—lateral view, C—style—ventral view, D—ædeagus—ventral view, E—pygofer hook—dorsal view, F—female seventh sternite and pygofers.



bluntly rounded apex. The style in ventral view with its distal portion narrow and sharply bent inwardly, the apex of the style bluntly rounded. The slender pygofer hooks arise on the dorso-caudal angle of the pygofer, taper to narrow, attenuate, sharply pointed apices, and curve outwardly in ventral view.

Holotype male collected at Valles, S.L.P., Oct. 24, 1941, by De-Long and Good; a damaged female collected by Dr. Dampf, El Mante, Tam., Sept. 26, 1930, (M.F. 1775), is referred to this species.