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A New Genus (Omanana) and Six New Species of Leafhoppers (Homoptera-Cicadellidae) from Mexico

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A broad headed leafhopper from Mexico with black transverse bands on the head was described by Ball in 1901 as Athysanus litigiosus. Since that time many specimens of this immediate group have been collected in Mexico. A detailed study of the color patterns and internal genital structures of the males indicate that they are closely related species with distinct structural (genitalic) characters, most of which are apparently undescribed. Furthermore, they apparently do not belong to any of the described genera. A new genus is therefore being erected at this time to include litigiosa and several previously undescribed species.

Genus Omanana n. gen.

Related to Osbornellus and Menosoma. Vertex broadly rounded, transverse, almost parallel margined, short and broad, margin usually thick, rounded to front, usually with broad black and white transverse bands on vertex, margin of vertex and upper portion of the front. Elytra usually broadly rounded at apex and apical cells short and almost in a linear arrangement. The anterior anteapical cell very short. Male plates similar to those of Osbornellus, with long narrow attenuated apices. Genotype Athysanus litigiosus Ball.

I take pleasure in dedicating this genus to Dr. Paul Oman, in Charge of Homoptera, U. S. National Museum, who has completed so much excellent work on the American Cicadellidae.

Omanana Litigiosa Ball

Athysanus litigiosus Ball. Can. Ent. 33: 51. 1901.

A short broad species with banded vertex and pale elytra with conspicuous ramose pigment markings. Length 5.5-6 mm.

Vertex broad, almost parallel margined, more than two and one-half times as wide as median length. Elytra short and broad.

Color: Face black, vertex margin including ocelli, pale with broad black band just beneath separated from the black face by a narrow white band. Two narrow black bands just above ocelli separated by a narrow white band. Posterior half of vertex tan with a darker broken band at base. Pronotum pale mottled with black. Scutellum with longitudinal dark markings. Elytra milk-white, heavily marked with dark ramose pigment lines. These form a narrow band on apex of clavus. Apical margin of elytra broadly black margined.

Genitalia: Female last ventral segment with produced pointed angles between which the posterior margin is deeply roundedly emarginate either side of a bluntly pointed median tooth produced to the distance of the lateral angles. Male plates triangular, convexly rounded at base, apices long, narrow, attenuated. Aedeagus with ventral and dorsal portion. The ventral portion is composed of a pair of long processes which are slightly inflated just before sharply pointed apices. In lateral view these processes are abruptly notched on upper margins and narrowed throughout the apical half of their length. The dorsal portion of the aedeagus is short with a dorsally produced basal process and, with the apex divided into three finger-like processes. Style rather broad at base abruptly narrowed on apical fourth to form a slender apical finger process.

Specimens of this species have been examined which were collected at Cuernavaca, Chilpancingo, Iguala, Buena Vista and Tetela del Rio, Mexico.

Omanana dampfi n. sp.

Resembling *litigiosa* in color and general appearance but smaller and with more produced vertex. Length 5.5 mm.

Vertex broadly roundedly produced, almost twice as long at middle as next the eyes, slightly depressed just above margin, giving the apex a sharply angled appearance.

Color: Face black to pale marginal band. Vertex marked as in *litigiosa* with two black bands on anterior half separated by a pale band and with a broken band at base. Pronotum and elytra appearing more heavily mottled with brown than in *litigiosa*.

Genitalia: Male plates convexly rounded at base, triangular with long, attenuated apices. Valve broadly triangular. Aedeagus composed of a ventral and dorsal process. The ventral portion is broad in ventral view with an outer produced portion at the margin on either side which is pointed at apex. In lateral view there is a heavy pointed dorsal spur just beyond the middle, produced dorsally and caudally. The dorsal portion is semicircular with the anterior and posterior ends curved dorsally. Style gradually narrowed from base to apical fifth where it is abruptly notched and narrowed to form a produced, rather thick pointed, apical process.

Holotype male from Balsas, Guerrero, Mexico, August 15, 1930, collected by J. Parra.

Omanana similaris n. sp.

Resembling dampfi in size, form, coloration and genital structures. The latter characters are considered distinct and the margin of the vertex is more blunt than in dampfi. Length 5 mm.

Vertex broadly rounded, appearing almost parallel margined, more than twice as long as median length. Margin bluntly angled, face convexly rounded.

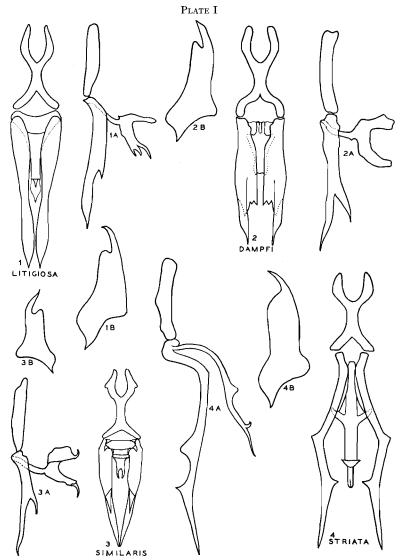


Fig. 1. Ventral view of aedeagus of *litigiosa*; 1a. lateral view of aedeagus; 1b. ventral view of style. Fig. 2. Ventral view of aedeagus of *dampfi*; 2a. lateral view of aedeagus; 2b. ventral view of style. Fig. 3. Ventral view of aedeagus of *similaris*; 3a. lateral view of aedeagus; 3b. ventral view of style. Fig. 4. Ventral view of aedeagus of *striata*; 4a. lateral view of aedeagus; 4b. ventral view of style.

Color: Vertex with the pale band on margin between ocelli, above which are the two heavy black transverse bands separated by a white band and the paler band on posterior margin between the eyes. Face with a heavy transverse black band just beneath the pale marginal band separated from

the black face by a narrow pale transverse line. Pronotum mottled with brown. Elytra with brown ramose pigment lines between the brown veins. Apex of elytra broadly margined with brown.

Genitalia: Male plates elongate, triangular, with narrow tapered apices. Aedeagus similar to dampfi but without the central portion between the upturned spines at middle of ventral processes. The branching of these ventral processes also occurs nearer the base than in dampfi. The dorsal portion of the aedeagus is semicircular, concave upward.

Holotype male taken at Iguala (Guerrero), Mexico, September 11, 1939 by DeLong and Plummer.

Omanana striata n. sp.

In color and appearance resembling *litigiosa* but more elongate and with a more narrowed vertex. Length 6-6.5 mm.

Vertex rather broadly rounded, almost parallel margined, twice as wide as long. Elytra rather long and narrow.

Color: Vertex margin marked with a pale line between the ocelli below which is a broad black band separated from the black face by a broad white band. Vertex marked with three broad black bands separated by white bands and with a narrow white band on the base. Pronotum dark brown with a few pale mottlings. Elytra smoky subhyaline, veins brown with brownish markings on certain areas.

Genitalia: Female last ventral segment white with rounded lateral angles, posterior margin produced on middle fourth to form a rather broad tooth which is more than half as long as the segment. Male valve short, transverse, broadly triangular, plates rather narrow, tapered to long narrow apices which are broadened on apical fourth and very densely set with long conspicuous hairs. Aedeagus composed of a pair of long processes which are slender, pointed on outer margin near middle and each bears a pointed spine on inner margin about one fourth the distance from the apex. Dorsal portion arising at base, long, slender, directed dorsally with a pair of lateral processes near middle and a small dorsal spur near apex. Style rather abruptly narrowed just before apex and produced forming a narrow finger-like process.

Holotype male, allotype female and a large series of male and female paratypes were collected at Finca Vergel (Chiapas), Mexico during May 1935 by Dr. Alfons Dampf.

Omanana pallidens n. sp.

Resembling litigiosus in general appearance but with fainter color markings. Length 6.5 mm.

Vertex broadly rounded, scarcely longer at middle than next the eyes, more than twice as wide as median length.

Color: Tan, vertex with pale margin and three faint brownish transverse bands. Two broad black bands just beneath margin separated by a white band, face brown. Elytra pale tan, veins narrowly brown, marked with scattered brown spots and ramose pigment lines.

Genitalia: Male plates long, narrow, tapered to form long narrow attenuated apices. Aedeagus composed of a pair of long, curved processes serrated on inner margins on median half and curled to form pointed apical tips. A median portion arises between these processes and extends almost half way to apex with a dorsal process broadened at the tip arising near apex. Style rather long and narrow abruptly narrowed forming a slender finger-like process on apical fifth.

Holotype male collected at Tetela del Rio, August 13, 1930 by G. Parra.

Omanana angustata n. sp.

Resembling *litigiosa* in general appearance but paler in color and without ramose pigment lines on elytra. Length 6.5–7.5 mm.

Vertex broadly rounded, only a little longer at middle than length at eyes and more than twice as broad as long.

Color: Tan, margin of vertex pale with three narrow, transverse brown bands, the one on base pale or broken. A broad black band just beneath margin separated from the black face by a white band. Pronotum mottled with brown. Elytra smoky, veins brown marked with milk-white spots and brownish blotches. Apical margins of elytra broadly brownish.

Genitalia: Female last ventral segment with lateral margins rounded, posterior margin with median two-thirds forming a broadly roundedly produced lobe. Male plates triangular, outer margins convexly rounded to pointed apices. Aedeagus in ventral view with basal portion deeply broadly cleft at middle, forming two outer portions each of which bears a dorsal and two apical finger-like processes. The dorsal process is long and slender, arising at about half the length of the aedeagus. The outer apical process is long and slender, the inner process is shorter, more broadened and curved outwardly and apically. The dorsal portion is semicircularly curved with the basal portion broadened and both anterior and posterior ends curved dorsally. The style is narrowed near base and produced to near apex where it is abruptly notched and produced to form a narrow pointed finger-like apex.

Holotype male collected at Amacuzac, Morelos, August 1, 1930 by J. Parra. Allotype female labeled "Mexico" without specific date and male and female paratypes from Iguala, Mexico and others labeled "Mexico."

Omanana nigrifrons n. sp.

Resembling *litigiosa* in general form and appearance but smaller with paler markings on vertex, pronotum and scutellum. Length 5 mm.

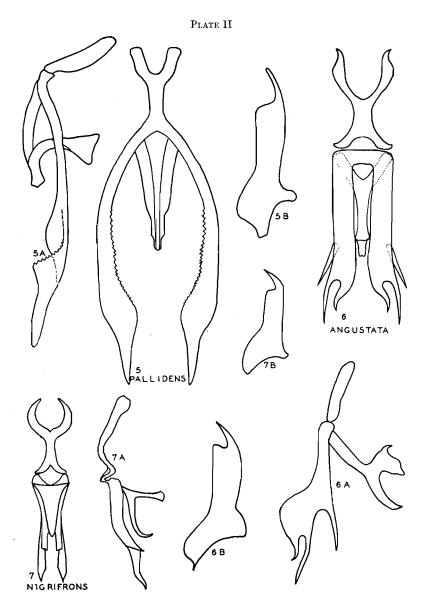


Fig. 5. Ventral view of aedeagus of pallidens; 5a. lateral view of aedeagus; 5b. ventral view of style. Fig. 6. Ventral view of aedeagus of augustata; 6a. lateral view of aedeagus; 6b. ventral view of style. Fig. 7. Ventral view of aedeagus of nigrifrons; 7a. lateral view of aedeagus; 7b. ventral view of style.

Vertex broadly rounded, a little longer at middle than next the eyes and twice as wide as median length.

Color: Cream, margin of vertex pale with two black longitudinal bands separated by a white band just above. A broad black band just below margin separated from the black face by a broad white band. Pronotum and scutellum cream, unmarked. Elytra cream, veins brown, rather evenly and thickly marked with short ramose pigment lines and spots. Apical elytral margins broadly marked with brown.

Genitalia: Female last ventral segment with lateral angles rounded to posterior margin which is produced at middle to form a narrow tooth which is about half as long as the segment. Male plates rather broad at base, rapidly narrowed to form long narrow attenuated tips. Aedeagus with ventral portion divided on apical half forming two parallel, sharply pointed processes. In lateral view these appear directed dorsally and caudally and gradually taper to pointed apices. Dorsal portion with a long basal dorsally directed process and an anterior process which is slender and curved dorsally at apex. Style rather narrow, notched near apex and produced to form a pointed apical finger process which is curved outwardly.

Holotype male, Iguala (Guerrero), Mexico, September 11, 1939 (DeLong and Plummer). Paratype male from the same locality and from Chilpancingo (Guerrero), September 10, 1939 (DeLong and Plummer) and from Balsas (Guerrero), August 15, 1930 (J. Parra).