

**A NEW GENUS ACUNASUS AND EIGHT NEW SPECIES OF
MEXICAN LEAFHOPPERS**

(Homoptera: Cicadellidae)

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Collecting in Mexico has brought to light several closely related species for which the Genus *Acunasus* has been erected. Apparently none of these species have been described and all seem to occur at elevations of from 2000 to 3000 feet. Most of these have been collected in the state of Guerrero, but one specimen was taken in the state of San Luis Potosi. They all live apparently upon the larger types of annuals or the shrub type of perennial in the hot dry areas of the low mountain ranges.

Genus *Acunasus* nov.

Probably related to *Mesamia* and *Twiningia*. The vertex is rather broad and not strongly produced and rather broadly rounded. The margin is thin, almost foliaceous, sloping upward. The disc between eyes is depressed and excavated. Face only slightly convexly rounded, extending straight to vertex margin. Pronotum decidedly wider than vertex with strongly produced lateral angles. Elytra with two cross veins on inner sector. The second anteapical cell is long and slender, decidedly longer than first and third anteapical cells. The first anteapical is usually divided. Several costal veinlets are present especially on apical half. Clavus with very few cross veins. The male aedeagus is a complicated structure with a coiled basal portion in every species and is difficult to describe. Genotype *Acunasus nigriviridis* n. sp.

All type specimens, unless otherwise designated, are in the author's private collection.

***Acunasus nigriviridis* n. sp.**

A greenish species marked with black on vertex and with brown to blackish elytra. Length 6-6.5 mm.

Vertex rather broad and short, almost twice as wide between eyes at base as median length and only slightly longer at middle than next the eyes. The disc is deeply excavated so as to form a sharp edged margin which is narrowly foliaceous with the front. Face slightly indented either side of middle below the margin of vertex.

Color.—Green tinged with yellow, with four black spots just above margin. The pair at middle are proximal and larger than the spot next each ocellus. Scutellum green with yellowish basal angles. Face green washed with yellow, the black spots on margin of vertex visible from below. Elytra yellowish hyaline, veins darker, the claval area dark brown with white areolar spots, the brownish coloration often extends onto the corium.

Genitalia.—Male valve short, transverse, lying in the concavity of the last ventral segment. Male plates long, gradually tapered to

bluntly pointed apices. Aedeagus complicated in structure, composed of an S-shaped twisted tubular portion which passes through a straighter portion at about its middle. The pygofer bears a long black spine on each side arising on the inner ventral margin at about its middle and extends for about one-third the length of the pygofer beyond its apex.

Holotype male and paratype males from Iguala, Gro., Mexico, October 25, 1941, (Good and DeLong), and September 11, 1939, (Plummer and DeLong). *Paratype males* from Cocula, Gro., Mexico, August 6, 1930 (M. F. 1733) Dampf.

Acunasus cruciatus n. sp.

In form and general appearance resembling *nigriviridis* but with different color pattern and distinct genitalia. Length 6 mm.

Vertex more than one-half as long at middle as basal width between the eyes, depressed just back of apex.

Color.—Vertex dull green, the anterior marginal border paler with a pair of apical spots which are triangular and scarcely separated and a smaller spot next each ocellus. Pronotum dull green, disc and posterior portion brownish. Scutellum dull green tinged with brown, the basal angles brown. Elytra pale with a wide brownish border along the margin of scutellum, an angular brown saddle across middle of clavus, the narrow pointed ends of saddle terminate on middle of costa on either side. Tip of clavus, second anteapical cell and apices of elytra, brown. Face bright green, with black spots of margin showing from below.

Genitalia.—Male plates elongate, triangular with narrow blunt apices. Style with a long, narrow, finger-like apical portion which is almost as long as basal portion. Aedeagus consisting of a coiled tube at base, which is narrow but becomes widened to form a blunt caudal portion and a blunt dorsal finger-like portion separated from the caudal portion by a deep U-shaped excavation. The pygofer bears a rather short, heavy spine which arises on the ventral caudal angle, extends dorsally and is fused for more than half its length with the caudal margin of pygofer.

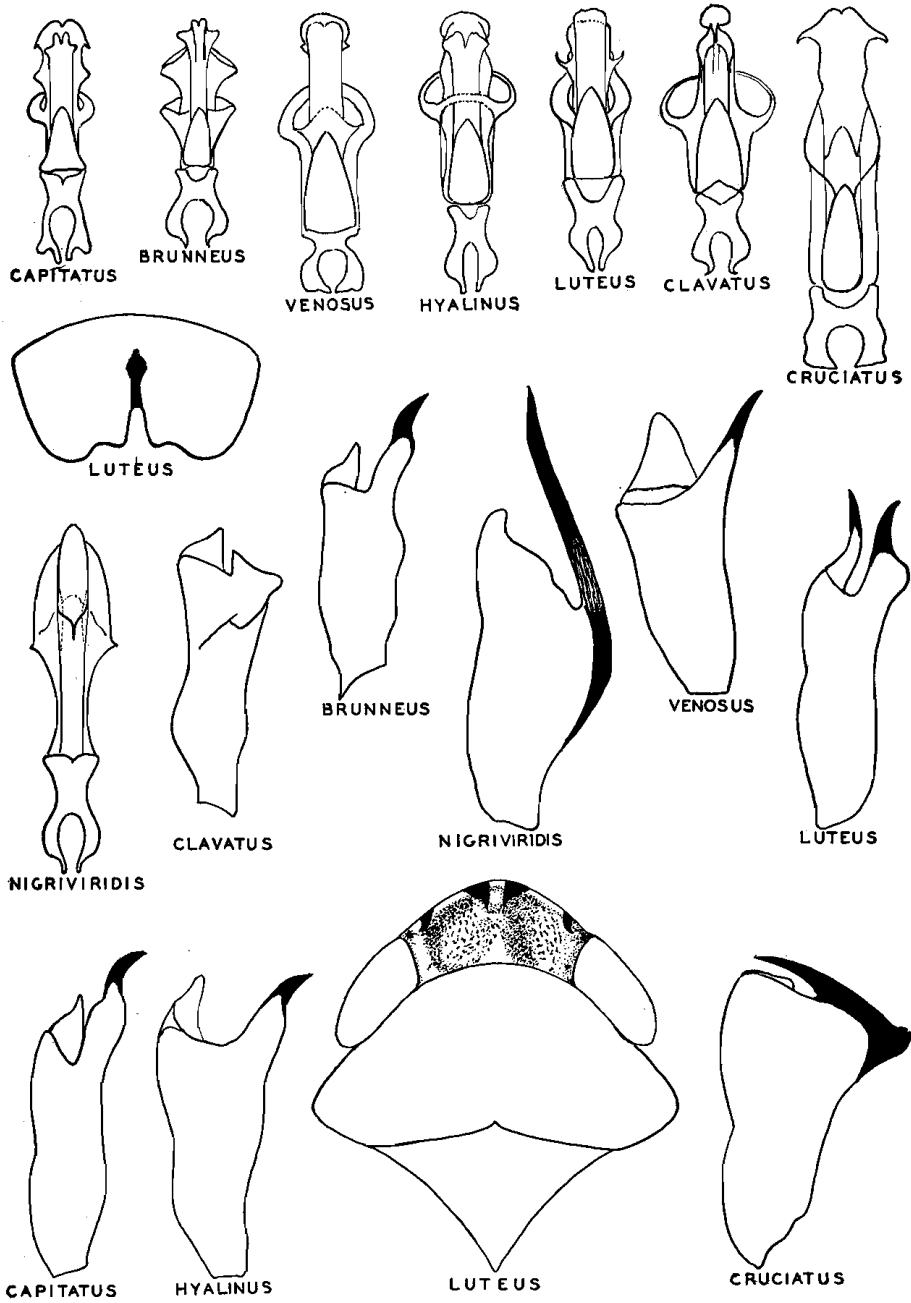
Holotype male collected at Iguala, Gro., Mexico, September 11, 1939, by Plummer and DeLong.

Acunasus brunneus n. sp.

A brown species resembling *nigriviridis* in general form and with distinct genitalia. Length 5.5 mm.

Vertex not quite twice as wide between eyes at base as median length.

Color.—Vertex brown with four black spots on anterior margin. A pair of proximal angular spots at apex and a smaller square spot next each ocellus. A white spot at either side of middle next margin of eye. Pronotum dark brown, anterior margin paler brown, a transverse row of white spots just back of margin. Scutellum brown, a white spot at about half the distance on each side. Elytra hyaline, marked with brownish irrorations on clavus, disc, and apex so as to form a saddle across middle of elytra and a darkened area at apex. Face dull yellow irrorate with brown.



Dorsal view of head, last ventral female segment, ventral view of aedeagus and ventral view of pygofer of *Acunasus luteus* n. sp. Ventral view of aedeagi and pygofers of other species as labeled.

Genitalia.—Male plates triangular, elongate, with blunt apices, only slightly exceeding in length the narrow elongated styles. Aedeagus with a coiled tubular portion at base, the apical half enlarged. The dorsal surface bears two blunt processes separated by a deep U-shaped excavation. Pygofer with a rather long spine arising on the ventro-caudal angle, the apical third of which is bent, narrowed to a pointed apex and is black in color.

Holotype male and paratype males taken at Iguala, Gro., Mexico, September 11, 1939, by Plummer and DeLong. Three *male paratype* specimens in the Ball collection U.S.N.M., were collected on the Cuernavaca-Acapulca road, August 22 and 23, 1939, by Ball and Stone.

Acunasus hyalinus n. sp.

In general form and appearance resembling *nigriviridis*, but with vertex more abruptly produced next the eyes and with distinct coloration and male genitalia. Length, male 6.5 mm.

Vertex about one and one-half times as wide between eyes as median length, and the vertex appears to be abruptly produced next the eyes and broadly rounded in front. The disc is depressed and the margin is thin and turned up.

Color.—Vertex yellowish marked with orange and with six black spots on margin. There are two at apex, one either side just anterior to each ocellus and one next each eye. Pronotum orange with a row of yellow spots just back of anterior margin. Scutellum orange, a longitudinal yellow spot either side just inside the basal angles terminating in a triangular spot on each side about half-way from base to apex. Elytra hyaline, veins orange, costal veinlets brown. Face yellow, the black spots on margin conspicuous from beneath.

Genitalia.—Male plates elongate, triangular; apices bluntly pointed, each style with apical half forming narrow, finger-like apices. Basal half of aedeagus consisting of a coiled tube-like structure. Apical half broadened with an anterior and a posterior dorsal process, both of which are blunt and separated by a deep U-shaped excavation. Pygofer with a broad spine-like projection on the ventro-caudal angle which is broad at base and tapered to a pointed apex. The apical portion is black.

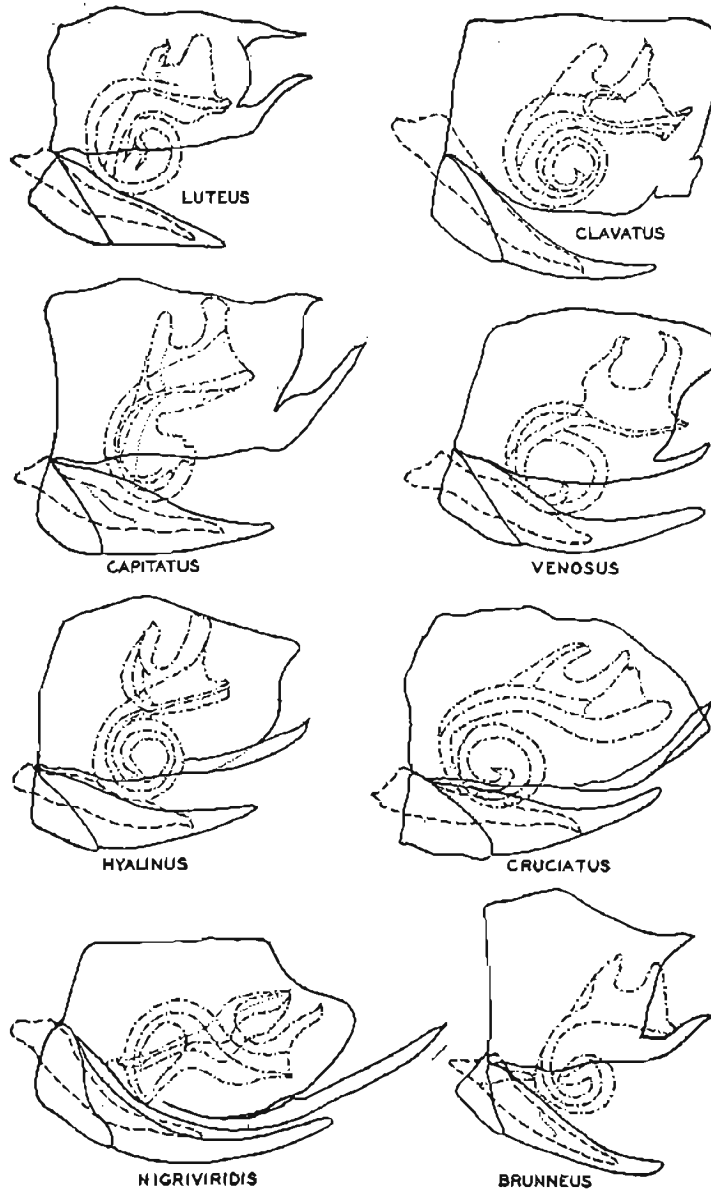
Holotype male collected at Iguala, Guerrero, Mexico, September 11, 1939, by C. C. Plummer and the author.

Acunasus venosus n. sp.

Resembling *brunneus* in form and general appearance but with distinct coloration and male genitalia. Length 5.5 mm.

Vertex not quite twice as wide as median length, broadly, obtusely angled.

Color.—Vertex yellow irrorate with brown, a round white spot on either side next margin of eye. Margin with a pair of triangular spots at apex. An elongate spot just anterior to each ocellus and a black spot just above ocellus next each eye. Pronotum dull brown with a row of pale spots just back of anterior margin. Scutellum pale orange with a longitudinal line just inside basal angles extending to middle of



Lateral views of male last abdominal segments as labeled showing aedeagi and styles in lateral view.

margin on either side. Elytra white, the veins orange and appearing raised or embossed. Face pale yellow, the black spots on the margin showing from beneath.

Genitalia.—Male plates elongate, triangular, apices bluntly pointed. Style with apical third slender, finger-like. Aedeagus coiled at base, apical portion broad with the caudal ventral angle pointed and with two rather long dorsal processes which are formed by a deep U-shaped excavation which separates these processes. Pygofer with a rather long spine on ventro-caudal margin which is broad at its fusion with pygofer and tapers to a narrow, pointed apex.

Holotype male collected at Iguala, Guerrero, Mexico, September 11, 1939, by Plummer and DeLong.

***Acunasus clavatus* n. sp.**

Resembling *hyalinus* in general form but with unique coloration and distinct male genitalia. Length 5.5 mm.

Vertex more produced than in other species of the genus, about one-third wider between eyes at base than median length.

Color.—Vertex dark orange; margin, a median longitudinal stripe and a narrow stripe next each eye, pale. Margin marked with a pair of black semicircular spots at middle. A spot just anterior to each ocellus and another next either eye. Pronotum orange to brown with a row of elongated spots just back of anterior margin. Scutellum dull orange, a small white spot in each basal angle and an elongated white spot on disc either side of middle. Elytra with clavus orange brown, with white, parallel elongated oblique markings along veins. Disc and costal area pale, veins orange brown, discal cell and anteapical cells with brown spots. Face pale yellow with darker yellow markings and with the black spots on margin showing from beneath.

Genitalia.—Male plates triangular with blunt rounded apices. Style with apical-third slender, finger-like. Aedeagus with ventral basal portion composed of a coiled tube. The dorso-apical portion with a pair of dorsal structures separated by a broad rather deep U-shaped excavation. Apex tapered and narrowed to an obliquely sloping blunt tip. Pygofer with a broad triangular ventral plate on the ventro-caudal margin which is separated from the pygofer by a notch on caudal margin.

Holotype male and paratype male collected at Zirandaro, Guerrero, Mexico, August 29, 1930, by Dr. Dampf. (M. F. 1786); *paratype male* from San Geronimo, Guerrero, Mexico, August 30, 1930, by Dr. Dampf. (M. F. 1787).

***Acunasus capitatus* n. sp.**

Resembling *brunneus* in form and general appearance but with distinct male genitalia. Length 5 mm.

Vertex rather broadly rounded, appearing almost parallel margined, a little more than half as long at middle as basal width between the eyes.

Color.—Pale brown, a pair of black spots at apex of margin separated by a white V-shaped spot. A black spot on margin just anterior to each ocellus and a white spot just back of each ocellus and next either

eye. Pronotum pale brown on anterior margin with a row of eight white spots. Disc and posterior portion of pronotum dark brown. Scutellum pale brown with a pale spot on anterior margin either side of median third and a larger white spot at the middle on each lateral margin. Elytra subhyaline with pale brown veins. Brownish irrorations on base, disc, central, anteapical cell and apices of apical cells of elytra. Claval portion washed or irrorate with brown in certain areas. Face yellow irrorate with brown.

Genitalia.—Male plates rather short, triangular, apices blunt but narrow and rounded. Apical half of style narrow, finger-like. Basal half of aedeagus composed of a flat plate-like structure with a tube coiled about its margin. This plate is constricted just before the basal half which is blunt at apex, produced a little more on ventral margin. Dorsally there is a pair of finger-like processes separated by a rather deep U-shaped excavation. Pygofer with a large spine produced on the ventro-caudal angle. The basal half is broad with the sides convexly rounded, the apical half is narrow and forming a curved pointed spine.

Holotype male collected at Tequila, Jalisco, Mexico, August 24, 1937, *paratype males* from Iguala, Guerrero, Mexico, September 11, 1939. (Plummer and DeLong.)

***Acunasus luteus* n. sp.**

In form and general appearance resembling *brunneus* but with distinct male genitalia. Length 5.5 mm.

Vertex rather broadly rounded, only slightly longer at middle than next the eyes and more than half as long at middle as basal width between the eyes.

Color.—Vertex with anterior margin white, disc and posterior margin orange brown. A pair of black, slightly separated angular spots at apex and a smaller black spot just anterior to each ocellus. A small black spot is just posterior to each ocellus posterior to which is a white spot next each eye. Pronotum pale brown on anterior margin with a row of eight white spots just posterior to anterior margin. Disc and posterior portion dark brown. Scutellum white with round orange spots on basal angles and the median third mottled with coalescing brownish spots. Elytra whitish subhyaline with brownish veins and brownish areas on clavus. Scattered brown irrorations on the elytra. Face pale yellow with pale brown irrorations.

Genitalia.—Female last ventral segment rather long lateral margins rounded to posterior margin which is deeply notched at middle either side of which the posterior margin is concavely rounded to the slightly produced rounded tip on outer portion of margin. Male plates rather short, triangular and with the apices bluntly angled. Style with the apical half forming slender finger-like processes. The basal half of aedeagus joining a coiled tube. The apical half broad, with a pair of short, thick dorsal processes separated by a short, narrow U-shaped notch. The posterior process is much larger than the anterior process. Pygofer with a long narrow pointed spine on the dorsal caudal angle and a broader spine on the ventro-caudal angle. The basal half is

broad and convexly rounded on the inner margin forming a rounded protrusion beyond which the apical half is rapidly narrowed to form a tapered curved pointed black spine.

Holotype male and paratype males collected at Iguala, Guerrero, Mexico, September 11, 1939 (Plummer and DeLong) and October 25, 1941, (Good and DeLong). One male paratype was collected at Balsas, Guerrero, Mexico, August 15, 1930, by J. Parra. (M. F. 1754). *Allotype female and paratypes males and females* in the Ball collection U.S.N.M. were collected on the Cuernavaca-Acapulca road, August 20 and 23, 1936, by Ball and Stone and at Jalaca, S.L.P., Mexico, August 13, 1936, by Ball.