

NEW SPECIES OF *GYPONA* AND *POLANA*
(HOMOPTERA: CICADELLIDAE – GYPONINAE)
FROM CENTRAL AND SOUTH AMERICA

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ABSTRACT

Two new species of *Gypona*, *G. veneza* sp.n. (Venezuela), *G. glebra* sp.n. (Brazil), and 5 new species of *Polana*, *P. glata* sp.n. (Perú), *P. gomezi* sp.n. (Costa Rica), *P. villara* sp.n. (Argentina), *P. coverra* sp.n. (Panamá) and *P. luteonota* sp.n. (Bolivia) are described.

The genus *Gypona* was described by Germar (1821). A synopsis of the genus by DeLong and Freytag (1964) treated 44 species. Additional species were described by DeLong and Martinson (1972), DeLong and Kolbe (1974), (1975), DeLong and Freytag (1975) and DeLong and Linnavuori (1977). The genus *Polana* was described by DeLong (1942). A synopsis of *Polana* by DeLong and Freytag (1972) treated 87 species. Two new species of *Gypona* and five new species of *Polana* are described at this time.

Gypona veneza sp.n. (Figs. 1–5). Length of male 10 mm, female unknown. Crown more than half as long as basal width between eyes. Color, crown black with large white areas including and anterior to ocelli. Pronotum yellow with black lateral margins and a narrow black border behind eyes. Scutellum yellow. Forewings white subhyaline, clavus black at base, a smoky band across apical half of clavus extending to costa and apex of wings smoky, veins alternating black and white.

Male genitalia with plates two-thirds as long as median width, apices broad, rounded. Style with blade broadened subapically, apex narrow, pointed. Aedeagus broad in lateral view, slender in ventral view. Aedeagal shaft broadened subapically, apical portion narrowed, bent dorsally, apex bluntly pointed, bearing two apical processes, one-third length of shaft. Pygofer gradually narrowed apically apex rather broadly rounded.

Holotype male Monagas, near Caicara, Venezuela, VIII-18-68. José Osorio coll. *G. veneza* is related to *G. candela* and is placed in the subgenus *Marganalana*.

Gypona glebra sp.n. (Figs. 6-10). Length of male 6.5 mm, female 7.5 mm. Crown short, broadly, roundly produced; one-third as long at middle as basal width between eyes, appearing almost parallel margined. Color, crown, pronotum and scutellum dull yellow. A round black spot on each side of pronotum behind eye and about one-third the length of pronotum. Forewings dull yellow, anterior claval area and apical area darker, iridescent; veins inconspicuous, face yellow. Female seventh sternum with posterior margin deeply excavated on both sides of a produced median lobe which is medially notched. Male genital plates about two and one-half times as long as wide, appearing parallel margined, apices broad, truncate. Style irregularly tapered from base to a broadened apical third, which forms a short, blunt tubercle on the ventral apical surface and is tapered and produced to form a long, pointed dorsal portion. Aedeagus simple, shaft rather broad, apex bluntly pointed. Pygofer with broad, slightly rounded apex.

Holotype male, Caraca, Minas Geraes, Brazil. Paratypes: ♀ Nova Teutonia, Santa Catarina, Brazil, Jan. 29, 1950. Remett Plaumann; ♀ same except March 25, 1951.

Holotype and paratype in the North Carolina State College collection, paratype in the DeLong collection.

G. glebra is related to *G. nacula* and is placed in the subgenus *Marganalana*.

Polana elata sp.n. (Figs. 11-15). Length of male 7 mm, female unknown. Crown more than twice as wide at base between eyes as median length. Ocelli closer to eyes than to median line. Color, crown and pronotum yellow, ocelli red, a round black spot behind each eye, at one-third length of pronotum. Scutellum dull yellow with paler yellow spots on anterior and median portions, and apical third light yellow. Forewings dull whitish yellow with nine prominent brown spots; three at apex of claval veins along commissure, four on costa, one on corium and one at inner margin of third apical cell. Male genital plates three and one-half times as long as median width, apices narrowed and rounded. Style slender with and enlarged "foot-like" apex. The ventral portion is rounded and "heel-like", the dorsal portion is produced and blunt with the basal margin bearing a short, pointed tooth. Aedeagus with shaft curving dorsally. Two lateral processes arise at base of shaft and extend along shaft for two-thirds their length, their apices pointed. Pygofer with apex narrowed and rounded.

Holotype male Yurimaguas, Perú IV-15-1920. Paratype male same data as holotype, both in the DeLong collection.

P. elata is related to *P. piceata* and is placed in the subgenus *Bulbusana*.

Polana gomezi sp.n. (Figs. 16–20). Length of male 8 mm, female unknown. Crown broadly rounded, two and one-half times as wide at base between eyes as median length. Ocelli nearer eyes than median line and nearer anterior margin than base of crown. Color pale brown, crown with a small dark brown spot at base behind ocelli, each side. Pronotum with a rather large dark brown spot near margin, each side, behind inner margins of eyes. Scutellum with basal angles dark brown. Forewings pale brown with veins margined with dark brown; two small brown spots on clavus near commissure and two on corium.

Male genitalia with plates four and one-half times as long as median width, apex narrow, rounded. Style blade broadened at half its length and again subapically by a convexly rounded protrusion on ventral margin. Apex narrowed and blunt, bearing a small sclerotized disc at tip. Aedeagal shaft divided subapically, forming a ventral portion which is divided and divergent at apex and a dorsal portion which is rounded at apex. Pygofer with a dorsal hooked spine, arising on inner wall of pygofer, with a recurved pointed apex.

Holotype: Male, Navarro, Cartago, Costa Rica, Jan–6–1978, Luis D. Gómez. coll.

P. gomezi is related to *P. pressa* but has a different style and the apex of the aedeagus is different. It is placed in the subgenus *Nihilana*.

I take pleasure in naming this species for Luis D. Gómez, Director of the Museo Nacional de Costa Rica.

Polana villara sp.n. (Figs. 21–25). Length of male 7.8 mm, female 8 mm. Crown broadly rounded, almost three times as wide at base between eyes as median length. Ocelli closer eyes than median line. Color crown pale brown. Pronotum pale brown, disc darker brown with six small dark brown spots along anterior margin. The two median spots are proximal, and two behind each eye are at inner margin of eye. Scutellum yellowish brown. Forewings pale brown, an elongate black spot on middle of costa; small dark brown spots are at apex of claval vein, along commissure, and along cross veins of corium. Veins partially margined with dark brown.

Female seventh sternum broadly, shallowly, concavely excavated between lateral angles and a broad median triangular lobe, which is produced to the same length as lateral angles.

Male genitalia with plates almost three times as long as median width, apices rounded. Style with blade slightly broadened subapically then narrowed to a small blunt circular sclerotized tip. Aedeagal shaft divided apically forming two slender processes.

Two broad processes arise at one-third length of shaft and extend along ventrolateral margin to apex of shaft, where they taper to slender apices, curve inwardly and cross. Pygofer with a dorsal process which extends ventrocaudally with an enlarged upturned apex bearing two apical teeth.

Holotype male, San Salvador, da Jujuy, Arg. X-21-68, L. & C. W. O'Brien colls. Allotype ♀ same data as holotype. Holotype an allotype in the DeLong collection.

P. villara is related to *P. fusconotata* and is placed in the subgenus *Polana*.

Polana coverra sp.n. (Figs. 26-30). Length of male 7.5 mm, female unknown. Crown two and one-half times as wide at base between eyes as median length. Ocelli closer to eyes than to median line, closer to anterior than to posterior margin. Color, crown, pronotum and scutellum dark brown. Forewings brown, subhyaline, apices smoky, with dark brown linear markings on claval veins at commissure and on cross veins on corium.

Male genitalia with plates three and one-half times as long as median width, apices narrow, rounded. Style with blade rather broad for two-thirds its length, the apical third gradually tapered to a dorsally curved, pointed apex. Aedeagal shaft divided near apex, the two portions divergent. A thin sheath-like process in longer than shaft and extends along ventral margin of shaft. A lateral process arises each side at base of shaft and extends along it laterally to about two-thirds length of shaft. Pygofer with dorsal process arising on inner margin and extending to apex of pygofer. Apex of process blunt, rounded.

Holotype male Panamá, Las Cumbres VI-8-67, Henk Wolda coll. In the DeLong collection *P. coverra* is related to *P. bruneola* and is placed in the subgenus *Bulbusana*.

Polana luteonota sp.n. (Figs. 31-35). Length of male 6.5 mm, female unknown. Head narrow, crown almost transverse, more than two and one-half times as broad at base between eyes as median length. Color, crown brownish yellow, a small dark brown spot at base behind each ocellus. Crown yellow, with large dark brown spots behind each eye and median apical portion dark brown, thus forming two broad yellow curved areas extending from humeral angle to base of pronotum at middle. Scutellum brown with darker brown basal angles and a small yellow spot, each side, of middle at base of scutellum. Forewings brownish subhyaline, veins narrowly margined with brown spots at commissure end of second claval vein, on corium, and on apical cross veins.

Male genitalia with plates three times as long as median width, apices narrowed, bluntly pointed. Style with apical half elongate triangular, apex curved dorsally and blunt. Aedeagal shaft trough-like, open ventrally, ventral edges heavily sclerotized and ventrally, concavely excavated, subapically. Parameres extending ventrally then curved dorsally, apices broadened and rounded. Pygofer with dorsal process, arising on inner wall of pygofer, extending apically to margin of pygofer, broadened, apex broadly rounded.

Holotype male Bolivia, San Esteban, 49 km. N. Santa Cruz XII-7-59, el. 1120 ft. R. Cumming coll.

P. luteonota is related to *P. bohemani* but can be distinguished by the different shaped style and aedeagus (see illustrations). It is placed in the subgenus *Bohemanella*.

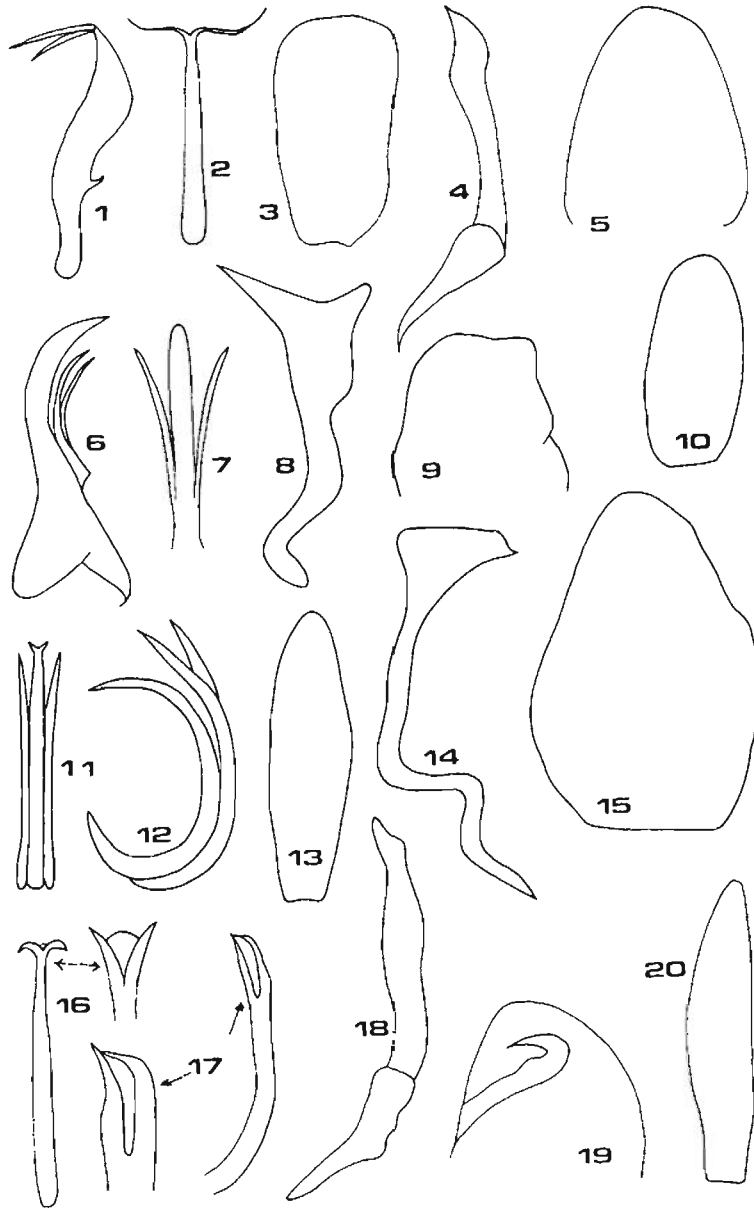
Resumen

Se describen siete nuevas especies de homópteros cicadélidos: *Gypona veneza* de Venezuela, *G. glebra* de Brasil, *Polana villara* de Argentina, *P. luteonota* de Bolivia, *P. gomezi* de Costa Rica, *P. coverra* de Panamá y *P. alata* de Perú.

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Plate I. Figs. 1–5 *Gypona venege* sp.n., 1. aedeagus laterally; 2. aedeagus ventrally; 3. plate ventrally; 4. style laterally; 5. pygofer laterally. Figs. 6–10 *G. glebra* sp.n.; 6. aedeagus laterally; 7. aedeagus ventrally; 8. style laterally; 9. pygofer laterally; 10. plate ventrally. Figs. 11–15 *Polana elata* sp.n., 11. aedeagus ventrally; 12. aedeagus laterally; 13. plate ventrally; 14. style laterally, 15. pygofer laterally. Figs. 16–20 *P. gomezi* sp.n., 16. aedeagus ventrally; 17. aedeagus laterally; 18. style laterally; 19. pygofer laterally, apical portion; 20. plate ventrally.



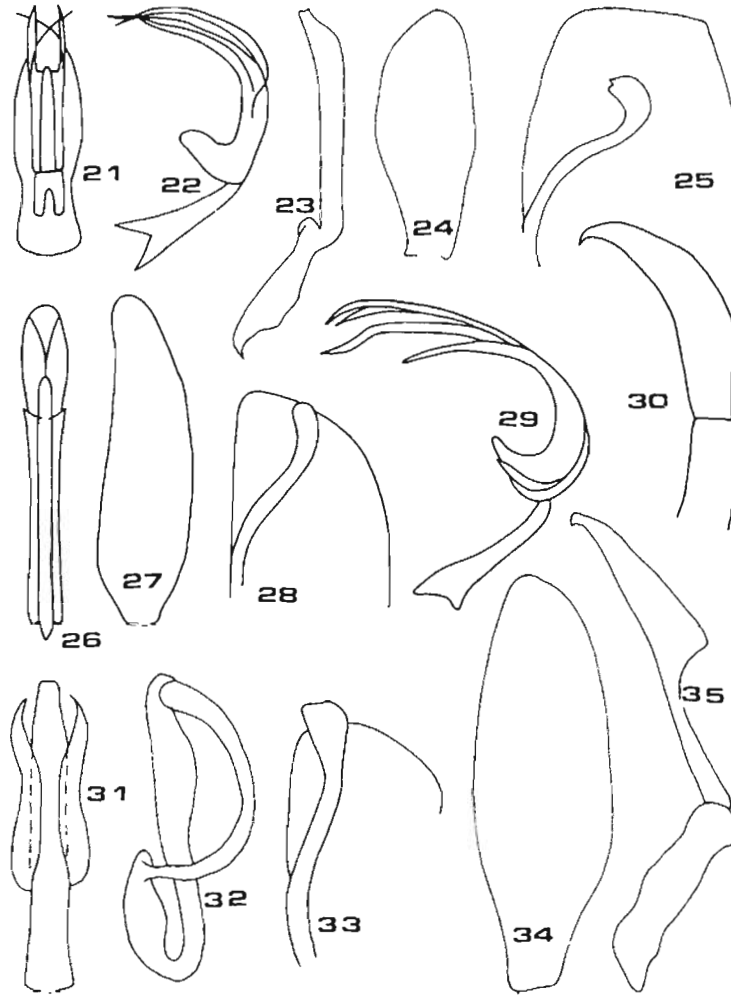


Plate II. Figs. 21–25 *Polana villara* sp.n.; 21. aedeagus ventrally; 22. aedeagus laterally; 23. style laterally; 24. plate ventrally; 25. pygofer laterally, apical portion. Figs. 26–30 *P. coverra* sp.n.; 26. aedeagus ventrally; 27. plate ventrally; 28. pygofer laterally, apical portion; 29. aedeagus laterally; 30. style laterally. Figs. 31–35 *P. luteonota* sp.n.; 31. aedeagus ventrally; 32. aedeagus laterally; 33. pygofer laterally, apical portion; 34. plate ventrally; 35. style laterally.