

NEW SPECIES OF *POLANA* (HOMOPTERA: CICADELLIDAE:
GYPONINAE) FROM BRAZIL AND PERU

Dwight M. DeLong

Department of Entomology, the Ohio State University

Key Word Index: Homoptera. Cicadellidae. *Polana*. Neotropics. Taxonomy

ABSTRACT

Four species of *Polana* from Brazil and Perú are described. Each species is placed in a different subgenus. *P. belema* n.sp. (Brazil), in subgenus *Bohemanella*, *P. fenestra* n.sp. (Brazil), in subgenus *Ponanana*, *P. insulia* n.sp. (Perú) in subgenus *Bulbusana* and *P. confusa* n.sp. (Perú) in the subgenus *Polana*.

The genus *Polana* was described by DeLong (1942). A synopsis of the genus, treating 87 species was published by DeLong and Freytag (1972). An additional species was described by DeLong (1976). New species were described by DeLong (1979a), (1979b), and (1979c). DeLong and Triplehorn (1979) described 5 new species. Two species were described by DeLong and Wolda (1978). Four species are described in the following pages. Types unless otherwise designated are in the DeLong collection, the Ohio State University.

Polana belema n.sp.
(Figs. 1-5)

Length of male 7 mm, female unknown. Crown broadly rounded, more than twice as wide at base between eyes as long at middle. Color: crown dark brown. Pronotum and scutellum paler brown. Forewings dark brown with areas of paler brown, veins dark brown.

Male genital plates 4 X as long as wide at middle, apices rounded. Style broad in lateral view, dorsocaudal half of apical portion produced, apex pointed, curved dorsally. Aedeagus with curved, bluntly pointed paraphyses extending almost to apex of shaft. Apical portion of shaft scarcely sclerotized. Pygofer with a bluntly pointed protrusion apically.

Holotype male, Belem, Mocambo, Brazil, April 24, 1977 L. Hock coll.

P. belema is placed in the subgenus *Bohemanella* and is most closely related to *P. chifama* DeLong & Freytag (1972 p. 250) from which it can be separated by the broader, shorter blade of the style and the longer aedeagal apical processes.

Polana fenestra n.sp.
(Figs. 6–10)

Length of male 7 mm, female unknown. Crown short, almost transverse 2 & 1/2 X as broad at base, between eyes, as long at middle, broadly rounded to front. Color: crown brown with a black spot at base, each side, behind ocelli. Pronotum brown with a row of large black spots each side near base. Scutellum brownish. Forewings brownish subhyaline, veins brown. A conspicuous hyaline spot at middle on costa, apices smoky.

Male genital plates 3 X as long as wide at middle, apex broadly rounded. Style concavely rounded and narrowed near base of blade. Apical portion broadened, apex almost truncate, slightly concave at middle. Aedeagal shaft rather long, apical third narrowed, concave on dorsal subapical margin, apex slightly notched. Pygofer narrowed, bluntly pointed apically.

Holotype male, Salinópolis, Brazil, April 16, 1977, P. Wolda coll.

P. fenestra is placed in the subgenus *Ponanana* and is closely related to *P. truncata* DeLong & Freytag (1972 p.312) from which it can be separated by the broad, blunt apex of the style and the absence of apical processes on the aedeagus.

Polana insulia n.sp.
(Figs. 11–15)

Length of male 11 mm, female unknown. Crown more than twice as wide at base between eyes as long at middle. Ocelli equidistant between eyes and median line. Color brownish yellow with margin dark brown and a small dark brown spot at base behind each ocellus. Pronotum brownish yellow with a row of 6 dark brown spots near and parallel with basal margin. Scutellum brownish yellow with 2 small proximal median brown spots. Forewing yellowish subhyaline with numerous irregular brown spots and markings. Veins brown.

Male genital plates 3 X as long as wide at middle, apices rounded. Style slender with curved blade which tapers to a pointed apex, Aedeagal shaft slender, pointed apically. Two slender lateral processes arise at base and extend to length of shaft. Pygofer broad, blunt apically.

Holotype male, Moyobamba, Perú, November 28, 1938 F. Woytkowski coll. in the Snow collection, University of Kansas.

P. insulia is placed in the subgenus *Bullusana* and is related to *P. piceata* (Osborn) (1938 p.45) from which it can be separated by the absence of a pygofer process, and by the long lateral processes of the aedeagal shaft.

Polana confusa n.sp.
(Figs. 16–20)

Length of male 12,5 mm, female unknown. Crown short, broadly rounded, appearing parallel margined, 4 X as wide between eyes at base as long at middle. Color, face and marginal area of crown pale yellowish. Remainder of crown black. Pronotum black with pale brownish spots and markings on disc. Scutellum with black median third bordered by white spots, separating it from pale brown basal angles. Forewings yellowish subhyaline with dark brown spots and ramose pigment.

Male genital plates short 1-1/2 X as long as wide at middle, apices rounded. Style rather broad in lateral view, apical portion enlarged, foot-like with a pointed apical "toe" and squarish basal "heel". Aedeagal shaft broadened subapically, bearing 2 anteapical processes which extend caudolaterally, each bearing a short-process which arises near shaft and extends caudally. Paraphyses narrow, short, appearing almost membranous. Pygofer narrowed, bluntly pointed apically.

Holotype male, Huanuco, Perú, Andes, 3000 m. Nov. 11–23 1937 in Snow Entomology collection, University of Kansas.

P. confusa is placed in the subgenus *Polana* and is related to *P. aspersa* DeLong & Freytag (1972 p.273) from which it can be separated by the shorter, thicker, foot-like, apical portion of the style and by the subapical processes of the aedeagus which extend caudally.

Literature Cited

- DeLong, D. M. 1942. A Monographic study of the North American Species of the subfamily *Gyponinae* (Homoptera: Cicadellidae) exclusive of *Xerophloea*. Ohio State University Graduate School Studies. Contribu. Zool. Entomol. No. 5 Biol. Series XIV 187 pp. 35 pl.
- DeLong, D. M. 1967. *Polana concinna* (Stal) and a closely related species of *Gyponinae* (Homoptera: Cicadellidae). *Revista Perú de Entomología*, 19(1):26.
- DeLong, D. M. 1979a. New Species of *Gypona* and *Polana* (Homoptera: Cicadellidae Gyponinae) from Central and South America. *Brenesia*, 16: 151–158.
- DeLong, D. M. 1979b. Studies of the Gyponinae with six new species of *Polana* Homoptera: Cicadellidae) *Proc. Entomol. Soc. Wash.*, 81(2):298–303.
- DeLong, D. M. 1979c. Two new subgenera and 3 new species of *Polana* (Homoptera: Cicadellidae) from Perú and Colombia. *Ent. News*, 90(3):167–170.
- DeLong, D. M. and P. H. Freytag. 1972. Studies of the world *Gyponinae* (Homoptera: Cicadellidae) the Genus *Polana*. *Arq. Zool. S. Paula*, 22(5):239–324.
- DeLong, D. M. and B. W. Triplehorn. 1979. New species of *Gyponinae* (Homoptera: Cicadellidae) from Perú. *Brenesia*, 16:175–188.
- DeLong, D. M. and H. Wolda. 1978. New species of *Polana* and (*Curtara* Gyponinae: Homoptera: Cicadellidae) from Panama. *Entomol. News.*, 89(9,10)227–230.

Figs. 1–5 *Polana belema*: 1. aedeagus ventrally; 2. aedeagus laterally; 3. style laterally; 4. plate ventrally; 5. pygofer laterally, apical portion. Figs. 6–10 *P. fenestra*: 6. aedeagus ventrally; 7. aedeagus laterally; 8. style laterally; 9. pygofer laterally, apical portion; 10. plate ventrally. Figs. 11–15 *P. insulia*: 11. aedeagus ventrally; 12. style laterally; 13. aedeagus laterally; 14. plate ventrally; 15. pygofer laterally, apical portion. Figs. 16–20 *P. confusa*: 16. plate ventrally; 17. aedeagus laterally; 18. aedeagus ventrally; 19. style laterally; 20. pygofer laterally, apical portion.

