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**STUDIES OF THE GYPONINAE: A NEW GENUS,  
PONANELLA, AND SEVEN NEW SPECIES  
(Homoptera: Cicadellidae)**

DWIGHT M. DELONG AND PAUL H. FREGTAG

**STUDIES OF THE GYPONINAE: A NEW GENUS,  
PONANELLA, AND SEVEN NEW SPECIES  
(Homoptera: Cicadellidae)<sup>1</sup>**

DWIGHT M. DELONG<sup>2</sup> AND PAUL H. FREGTAG<sup>3</sup>

ABSTRACT

A new genus, **Ponanella**—Gyponinae (Homoptera, Cicadellidae)—is described from Central and South America, with seven new species included: **P. ena** (type species), **P. felera**, **P. minuenda**, **P. santara**, **P. rubravenosa**, **P. gelata**, and **P. astra**.

Field collections made over the past several years have produced a number of small Gyponinae from Central and South American countries of a new genus that resembles small *Ponana*. The material at hand for study has been collected in Mexico, Guatemala, Panama, Venezuela,

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British Guiana, Brazil, and Peru, representing an apparent tropical Central and South American distribution.

Genus **Ponanella** n. gen.

Head distinctly narrower than pronotum; crown short and broad, more than twice as broad as median length, broadly rounded anteriorly, moderately produced, appearing almost parallel margined; ocelli almost as near to proximal eye as to median line. Crown sloping to a blunt rounded margin with front. Marginal curved portion with numerous transverse striae above and between antennal sockets. Front slightly depressed just beneath rounded margin. Hind tibia with four rows of spines; those on inner margin slender and thickly set, other three rows coarse, about the same length, more sparsely arranged. Aedeagus with terminal, basad directed, bifurcate processes.

Type species: *Ponanella ena* n. sp.

Species of *Ponanella* differ from *Ponana* by their smaller size and the thicker margin between crown and face: in *Ponanella* depressed slightly below margin, in *Ponana* depressed slightly above. The pronotum in *Ponana* is more produced and narrower anteriorly. The aedeagus in *Ponanella* has long bifid terminal processes which extend basad; in *Ponana*, if such processes occur they are very short or not bifid.

Key to Males of *Ponanella*

1. Color green or pale yellow with two small round black spots on pronotum; without markings on tegmina ..... *ena* n. sp.  
Color yellow to pale brown with distinct black markings on clavus and/or apical portion of tegmina ..... 2
2. Style with apical portion greatly broadened, triangular ... *astra* n. sp.  
Style elongate ..... 3
3. Aedeagal apical processes with outer branch extending to base of shaft ..... *rubravenosa* n. sp.  
Aedeagal apical processes shorter, extending not more than two thirds distance to base of shaft ..... 4
4. Aedeagal apical processes, with inner branch with three apical terminal processes ..... 5  
Aedeagal apical processes with inner branch with two apical terminal processes ..... 6
5. Style not enlarged on apical half; pygofer spine notched with a dorsal pointed and a ventral rounded lobe ..... *felera* n. sp.  
Style broadened on apical half; pygofer spine without a visible ventral lobe ..... *santara* n. sp.
6. Style slightly enlarged near apex, aedeagal terminal processes with outer branch longer than inner branch; pygofer spine slightly notched at apex with small rounded ventral lobe .. *minuenda* n. sp.  
Style distinctly enlarged on apical fourth, aedeagal terminal processes with inner branch longer than outer branch; pygofer

spine notched, with a distinct produced rounded ventral lobe .....  
 ..... *gelata* n. sp.

#### Key to Known Females of *Ponanella*

1. Posterior margin of seventh sternum with a slightly produced, broad, median lobe ..... *felera* n. sp.  
 Posterior margin of seventh sternum with slightly produced blunt teeth on median third ..... 2
2. Teeth on seventh sternum proximal, separated by a V-shaped notch ..... *minuenda* n. sp.  
 Teeth on seventh sternum separated by a broad, shallow, U-shaped excavation ..... *ena* n. sp.

#### *Ponanella ena* n. sp.

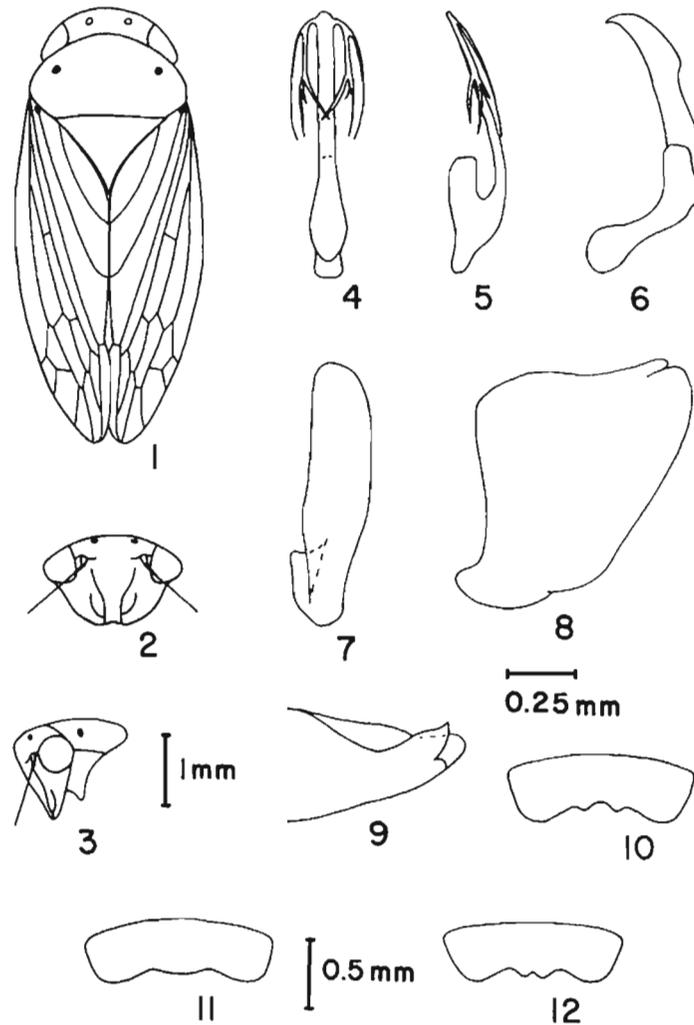
(Figs. 1-10)

Length of male 5.7 mm, of female 6 mm. Crown short, broadly rounded, more than twice as broad between eyes at base as median length. Color: yellow, tinged with green. Ocelli appearing black. Pronotum with a small, round, black spot behind each eye at about one-third length of pronotum and rather close to lateral margins. Veins yellow, usually darker in color than wing membrane.

Male genitalia with plates elongate, rather broad at apex, inner margins convexly curved to outer margins. Styles stout, each with a "footlike" apex, a slight protruding "heel" on ventral margin, then convexly curved and narrowed to form a dorsally curved, sharp-pointed "toe." Aedeagus shaft narrow with a terminal process arising on each side at apex, extending laterally, then curving basad. Process bifid near shaft; inner part extending basad near and parallel to shaft, bifurcate at one-half distance from apex of shaft. Apical pieces slender, extending about half way to base, the outer process on inner part giving rise to a spur near base; outer part slender and extending about one-half distance to base.

Female genitalia with lateral angles of seventh sternum broadly rounded, forming posterior margin on each side to median fourth, medial posterior margin with a pair of short, broadly, slightly produced median lobes separated by a median U-shaped notch.

Types. Holotype male, Chiehicazapa, Oaxaca, Mex., VII-11-1932, D. Quiroz. Allotype female, Tierro Colorado, Guerrero, Mex., 290 m, XII-28, 29, A. Dampf. Paratypes: 3 ♂, same data as allotype; 1 ♂, Potrero, Veracruz, Mex., IX-28, A. Dampf; 1 ♂, Barro Colorado, C. Z., I, III-1944, Zetck 5122; 1 ♀, same data except VII-4, 11-1941; 1 ♂, Panama C.Z., III-23-1952, F. S. Blanton coll.; 1 ♀, same data except Mojinga Swp, XII-20-1951; 1 ♂, Chautla, Mex., W. E. Stone coll.; 1 ♂, Rio T., 1934, H.S.L.; 1 ♂, Morales, Guatemala, X-1930, J. J. White; 2 ♂, 2 ♀, Brazil, "Sta. Catharina, Hansa Humboldt, W. 50 S. 26. 100 m.



FIGS. 1-12. Figs. 1-10, *Ponanella ena* n. sp. 1, Dorsal view. 2, Face. 3, Lat. view, head and pronotum. 4-5, Aedeagus, vent. and lat. views. 6, Laterovent. view, style. 7, Vent. view, plate. 8, Lat. view, pygofer. 9, Dorsal view, pygofer tip. 10, Vent. view, ♀ 7th sternum. Fig. 11, *P. felera* n. sp., vent. view, ♀ 7th sternum. Fig. 12, *P. minuenda* n. sp., vent. view, ♀ sternum (1-3, 4-9, 10-12, each same scale).

11.1930"; 2♂, 1♀, Santa Catarina, Brazil; 1♂, 13♀, Santa Elena de Uairer, Venezuela, X-20-1940, P. Anduze; 1♂, 2♀, Darien Prov., Santa Fe, Panama, VI-2-1967, D. M. DeLong and C. A. Triplehorn colls. Holotype, allotype, and paratypes in the DeLong Collection. Paratypes in the U. S. National Museum, the North Carolina State University, and the British Museum of Natural History collections.

**Ponanella felera** n. sp.

(Figs. 11, 13-18)

Length of male 5 mm, of female 6 mm. Crown short, broadly rounded, more than twice as broad between eyes at base as median length, with conspicuous transverse striae. Color: crown yellow, pronotum yellowish brown, paler along lateral margins, a small, round, black spot behind each eye at about one third length of pronotum and not far from lateral margin. Scutellum uniform yellowish brown. Forewings with claval area appearing darker than costal area. A black spot along commissure at end of each claval vein. Crossveins of inner sector, on disc, black.

Male genitalia with plates elongate, convexly rounded on outer margins, apex narrow, blunt, rounded. Styles stout, slightly broadened by rounded serrate protrusions on ventral margins at two-thirds their length, ventral margins then strongly, convexly rounded to form dorsally projecting, sharply pointed apices. Aedeagus shaft long, slender, a slender process arising on each side at apex, extending laterally, curving basad, and dividing into two slender parts. Inner part longer, extending more than half distance to base of shaft, bearing a spur on inner margin near base, bifid at about two-thirds its length, inner branch with a spur near base, outer branch slender and longer. The outer part long, unbranched, extending beyond the inner branch of inner part. Pygofer with a short spinelike tooth on inner dorsocaudal margin of pygofer on each side.

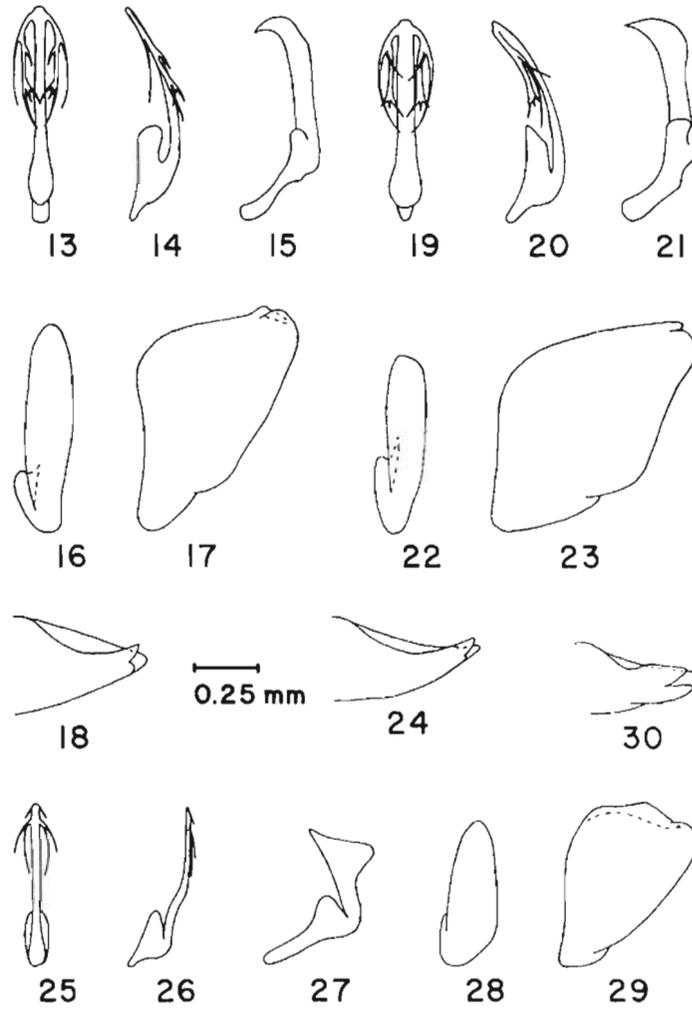
Female genitalia with lateral angles of seventh sternum produced and angled with posterior margin, margin sloping gently cephalad to median third; median portion slightly produced, almost truncate, with a slight indentation at each side of median third.

Types. Holotype male, Panama, Mojinga Swp, C. Z., VIII-1-1953, F. S. Blanton coll. Allotype female, Summit, Panama C. Z., VIII-1946, N. L. H. Krauss. Paratypes: 2♂, same data as holotype; 1♂, same data except V-2-1952; 1♂, British Guiana, Kutari sources, I, II-1936, G. A. Hudson, BM1936-360. Holotype, allotype, and paratypes in the U. S. National Museum Collection, paratypes in the British Museum of Natural History and the DeLong collections.

**Ponanella minuenda** n. sp.

(Figs. 12, 31-36)

Length of male 4.5 mm, of female 4.5 mm. Crown short, broadly rounded, almost parallel margined, three times as broad between eyes



FIGS. 13-30. Figs. 13-18, *Ponanella felera* n. sp. 13-14, Aedeagus, vent. and lat. views. 15, Laterovent. view, style. 16, Vent. view, plate. 17, Lat. view, pygofer. 18, Dorsal view, pygofer tip. Figs. 19-24, *P. santara* n. sp. 19-20, Aedeagus, vent. and lat. views. 21, Laterovent. view, style. 22, Vent. view, plate. 23, Lat. view, pygofer. 24, Dorsal view, pygofer tip. Figs. 25-30, *P. astra* n. sp. 25-26, Aedeagus, vent. and lat. views. 27, Laterovent. view, style. 28, Vent. view, plate. 29, Lat. view, pygofer. 30, Dorsal view, pygofer tip. (All same scale.)

at base as median length. Crown with numerous transverse striae. Color: crown, pronotum, and scutellum golden yellow, ocelli black. Forewings yellow, tinged with pale brown, two faint spots on clavus next to commissure at end of posterior claval veins. A dark spot at end of clavus and a dark spot on apical margin in outer apical cell.

Male genitalia with plates more than three times as long as broad, apices bluntly angled. Styles rather broad in lateral view, slightly widened at three-fourths their length on ventral margin, forming an angled tooth on each side, margin then sloping and convexly rounded at apex to an angled tip. Aedeagus narrow, a lateral process arising on each side at apex and extending almost half way to base. Process dividing not far from shaft, outer part a little longer and bearing a spine on inner margin near base, inner part dividing again at about two-thirds its length, forming two terminal spines. Pygofer with a slender spine arising dorsally on each side and curving ventrally over caudal margin.

Female genitalia with lateral angles of seventh sternum broadly rounded, median third of posterior margin broadly, shallowly excavated on either side of a pair of rounded median teeth, teeth slightly produced and separated by a median notch.

Types. Holotype male, San Esteban, Venezuela, XI-22, 30-1939, Pablo Anduze. Allotype female, same data as holotype. Holotype and allotype in the U. S. National Museum Collection.

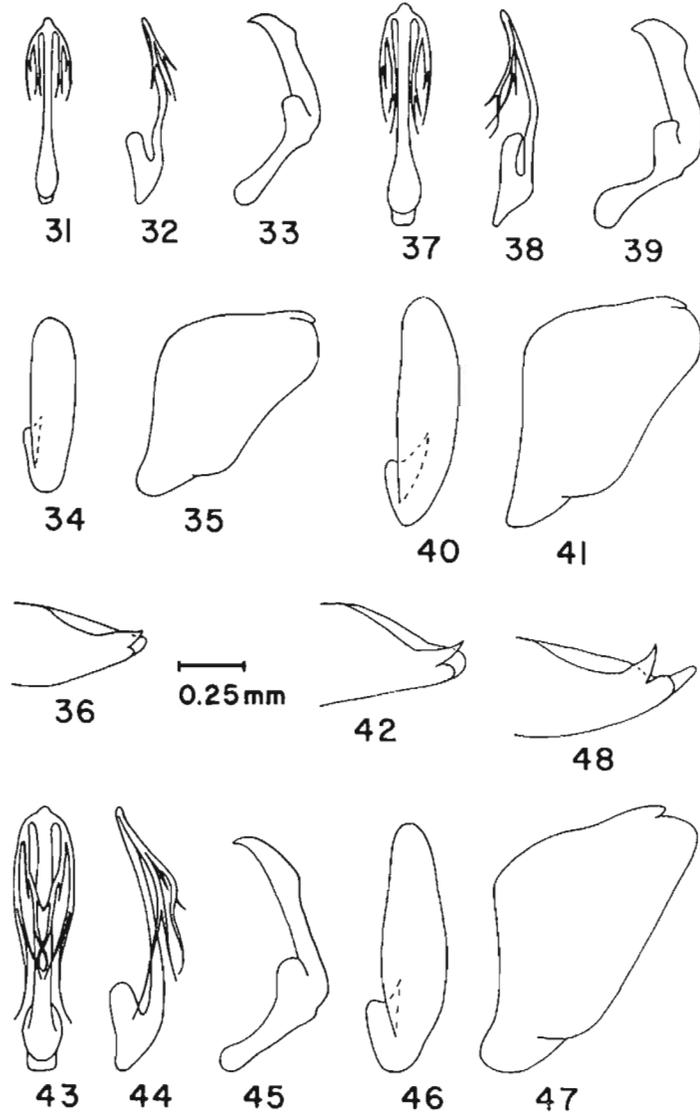
***Ponanella santara* n. sp.**

(Figs. 19-24)

Length of male 5.5 mm. Crown short, broadly rounded, almost three times as broad between eyes at base as median length. Crown with numerous transverse striae. Color: crown, pronotum, and scutellum dull yellow, ocelli pale. Pronotum with a small, round, dark spot behind each eye near lateral margin at about one-third length of pronotum. Forewings dull yellow with four dark spots along commissure, one at end of each oval vein. Two spots on disc of each wing, one on each crossvein.

Male genitalia with plates about three times as long as broad, apices rounded. Styles enlarged at base, broad in lateral view, apical fifth enlarged, apical portion bent dorsally and rapidly narrowed to pointed apices. Aedeagus with shaft rather stout, a lateral process arising on each side at apex, curving basally, divided into three slender parts at one-fifth length of shaft. Inner part extending about one-half distance to base; outer part extending almost to base and divided into three apical spinelike processes, the inner one longest; middle part short, extending about one-fourth distance to base.

Types. Holotype male, Santarem, Para., Brazil, IX-1933, L. C. Scaramuzza, in the North Carolina State University Collection.



FIGS. 31-48. Figs. 31-36, *Ponanella minuenda* n. sp. 31-32, Aedeagus, vent. and lat. view. 33, Laterovent. view, style. 34, Vent. view, plate. 35, Lat. view, pygofer. 36, Dorsal view, pygofer tip. Figs. 37-42, *P. gelata* n. sp. 37-38, Aedeagus, vent. and lat. view. 39, Laterovent. view, style. 40, Vent. view, plate. 41, Lat. view, pygofer. 42, Dorsal view, pygofer tip. Figs. 43-48, *P. rubravenosa* n. sp. 43-44, Aedeagus, vent. and lat. view. 45, Laterovent. view, style. 46, Vent. view, plate. 47, Lat. view, pygofer. 48, Dorsal view, pygofer tip. (All same scale.)

***Ponanella rubravenosa* n. sp.**  
(Figs. 43-48)

Length of male 6.3 mm. Crown short, broadly rounded, more than twice as wide between eyes at base as median length. Crown with conspicuous transverse striae. Color: crown, pronotum, and scutellum yellow tinged with brown. Ocelli black, a small, round, black spot on each side of pronotum behind eye near lateral margin about one-third length of pronotum. Forewings pale brown with conspicuous red veins, costal margin red. Claval area more brownish with a black spot at end of each claval vein next to commissure; a black spot on each crossvein on disc. Appendix and a transverse row of spots across anteapical cells smoky, apical cells pale brown.

Male genitalia with plates about four times as long as wide, tips narrowed and rounded. Styles in lateral view broadened at about two-thirds their length, faintly angled on ventral margin, then narrowed, curved dorsally at apices to pointed tips. Aedeagus with a lateral process arising just before apex on each side, branching near attachment to shaft. Inner part divided at one-third its length, outer branch very short, inner branch long, extending two-thirds distance to base and bearing a short spur on inner margin at one-half its length. Outer part long, reaching to base of shaft, divided at less than half its length, both portions long, but the outer about one third longer than the inner. Pygofer with a wide spur on inner dorsal margin before apex.

Types. Holotype male, Callanga, Peru, without specific data, in the U. S. National Museum Collection.

***Ponanella gelata* n. sp.**  
(Figs. 37-42)

Length of male 5 mm. Crown short, broadly rounded, anterior margin almost transverse, almost three times as broad between eyes at base as median length. Color: crown, pronotum, and scutellum dull sordid yellow; ocelli brown, a pair of minute, round, brown spots on pronotum. Forewings yellow, subhyaline, with four faint spots on clavus, one at end of each claval vein next to commissure. Darker spots on anteapical crossveins, a spot on apical margin.

Male genitalia with plates almost four times as long as broad, apices rounded. Styles broad in lateral view, widened on ventral margin at three-fourths their length, and angled, then margins convexly rounded to bluntly pointed apices. Aedeagus with a lateral process arising at each side just before apex of shaft, extending basally more than one-half its length. Process divided near attachment to shaft, then redivided, forming four terminal processes. Inner part longest, bifid at three-fourths its length, inner portion twice as long as outer portion; outer part slightly shorter, bifid at less than half its length, inner portion about half as long as outer. Pygofer rounded at apex with a prominent spine on inner dorsal margin on each side.

Types. Holotype male, Santa Elena de Uairen, Venezuela, IX-20-1940, P. Anduze, in the U. S. National Museum Collection.

***Ponanella astra* n. sp.**  
(Figs. 25-30)

Length of male 4.5 mm. Crown short and broadly rounded, about three times as broad between eyes at base as median length. Color: greenish yellow, crown, pronotum, and scutellum greenish, claval area of tegmina green, claval and apical areas pale brown. Crown with dark ocelli. A pair of small, round, black spots, one behind each eye, on pronotum. Scutellum unmarked. Tegmina with a large, rounded, black spot along inner margin of clavus at apex of scutellum. A slightly smaller black spot along commissure at end of median claval vein. A large black spot at apex of clavus, a large spot in outer apical cell, and two small transverse spots on disc; apical portion of tegmina smoky brown.

Male genitalia with plate elongated, bluntly pointed, two and one-half times as long as broad. Styles with the apical half triangular, apices pointed. Aedeagus with shaft elongate, slender, with a pair of short apical spines extending basad; a pair of longer, slender subapical processes curving basad, each bifurcate near shaft, inner branch longer than outer and extending basad about one-third the distance to base. Dorsal pygofer spine bifid at apex with a deep, median, V-shaped notch between apical processes.

Types. Holotype male, Barro Colorado, C. Z., Panama, V-19-1967, DeLong and Triplehorn, in the DeLong Collection.

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