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A Key to the Known Genera and Descriptions of
Five New Genera

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ABSTRACT

Five new genera of the subfamily Gyponinae are described: **Folicana** (type, *F. nota* n. sp.), **Costanana** (type, *C. dunda* n. sp.), **Acuera** (type, *A. adspersa* Stål), **Curtara** (type, *C. samera* n. sp.) and **Culumana** (type, *C. torqua* n. sp.). A key to all described genera of Gyponinae is presented.

During the past nine years the authors have described thirteen new genera of Gyponinae. Five additional genera are described at this time. Publication of a key to all described genera, which is presented here, has been delayed to make the key as complete as possible. Manuscripts of the five new genera, **Folicana**, **Costanana**, **Culumana**, **Curtara** and **Acuera** are in manuscript form and will be published soon.

KEY TO GENERA

The following are not recognized as gyponine genera: *Clinonana* Osborn and *Ohausia* Schmidt were treated as Ledorinae by Kramer (1966); *Scarisana* Metcalf is placed in the Cicadellinae; *Scaroidana* Osborn is placed in the Iassininae; *Margalana* Metcalf and *Bulbana* DeLong were treated as subgenera by DeLong and Freytag; *Darma* Walker (1858) *Clinonaria* Metcalf⁴ (1949, 1962) are considered synonyms of *Scaris* Lepeltier and Serville (1825).

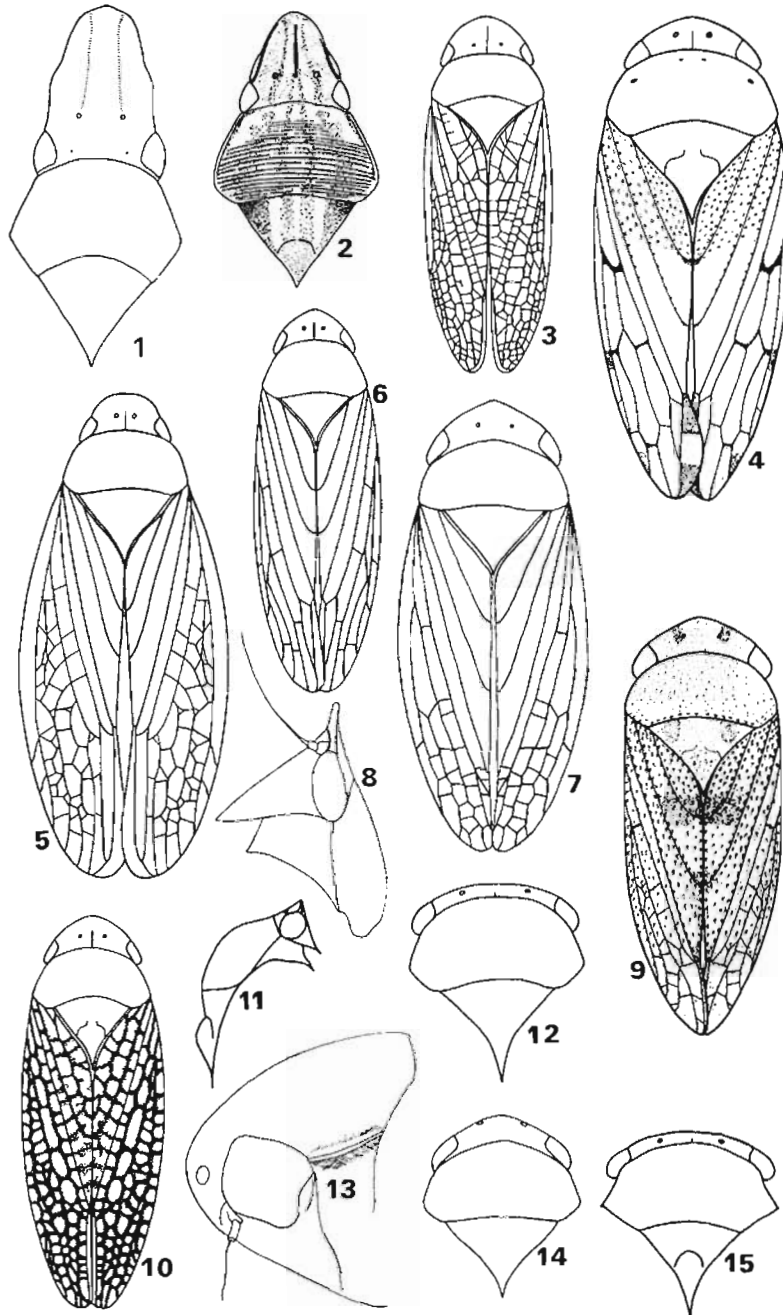
¹ Homoptera: Cicadellidae. This work was supported by the National Science Foundation Grant GB5659X. Received for publication October 4, 1971.

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⁴ New synonymy.

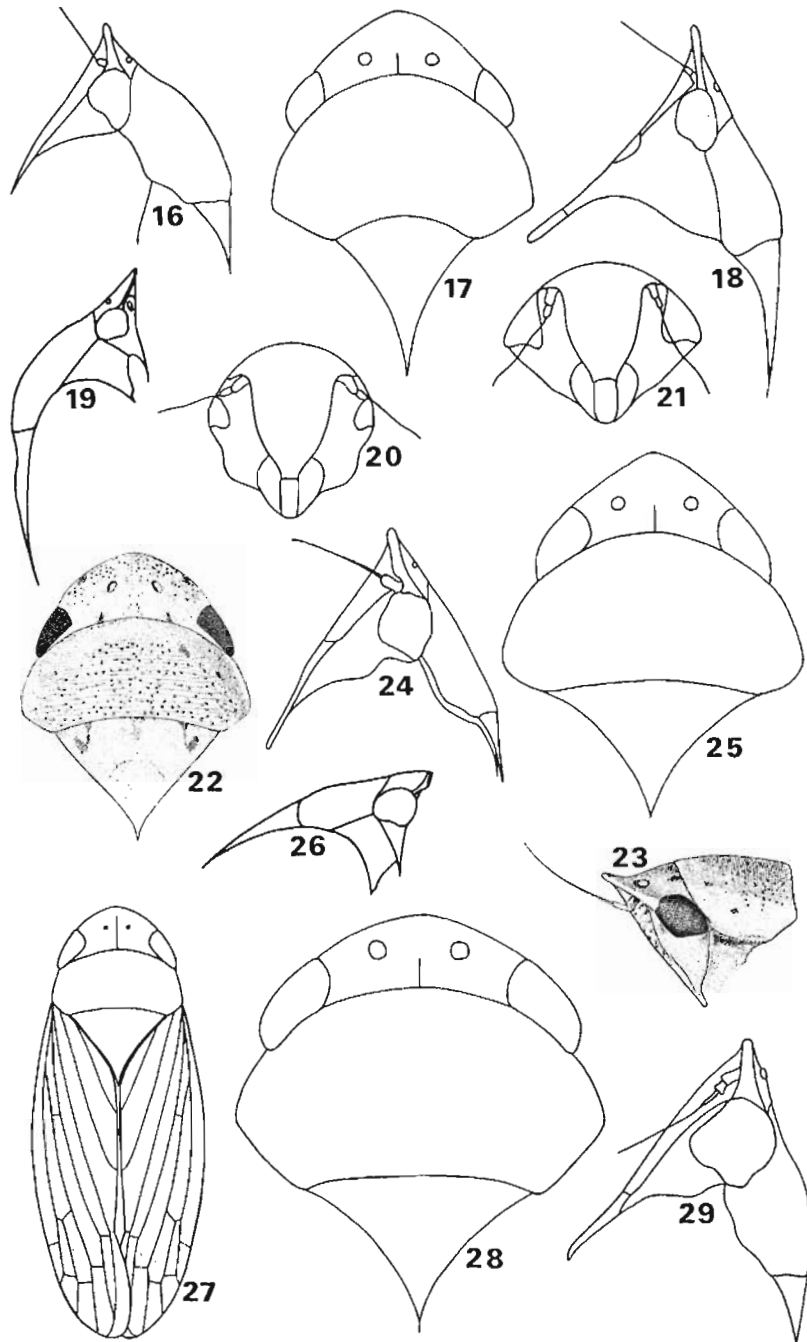
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|---------|---|----|
| 1. | Head elongate, flattened, crown bearing two elongate median carinae, one each side of median line; femoral setal formula 2-2-1-1 (South America) (Figs. 1, 69)
..... <i>Sulcana</i> DeLong and Freytag (1966c) | |
| 1'. | Head variable in length, without median carinae | 2 |
| 2(1') | Crown usually shorter than basal width; femoral setal formula 2-2-1 (Fig. 70) | 3 |
| 2'. | Crown longer than basal width; femoral setal formula 2-2-1-1 (South America) (Figs. 2, 69) | |
| | <i>Coelogypona</i> DeLong and Freytag (1966c) | |
| 3(2') | Basal portion of forewing pitted (Fig. 4) | 4 |
| 3'. | Basal portion of forewing not pitted (Fig. 5) | 5 |
| 4(3). | Forewing pits bearing fine setae (Mexico and southwestern U. S.) (Fig. 9) | |
| | <i>Dragonana</i> Ball and Reeves (1927) | |
| 4'. | Forewing pits without setae (Central America only) (Fig. 4) | |
| | <i>Zonana</i> DeLong and Freytag (1963b) | |
| 5(3') | Forewing rugose, appearing reticulate veined, or reticulate veined on entire or apical half (Figs. 3, 10) | 6 |
| 5'. | Forewing not rugose or reticulate veined (Fig. 6) | 12 |
| 6(5). | Forewing rugose, reticulate veins always present in forewing (Figs. 3, 10) | 7 |
| 6'. | Forewing usually not rugose but with reticulate veins on apical half (Fig. 5) | 8 |
| 7(6). | Crown with definite thin margin, head flat, foliaceous; mostly on oak (North and Central America (Fig. 10) | |
| | <i>Rugosana</i> DeLong (1942) | |
| 7'. | Crown without definite margin, rounded to face (known from Chile only) | |
| | <i>Chilella</i> DeLong and Freytag (1967b) | |
| 8(6') | Large leafhoppers, 12-16 mm in length; head narrow, strongly produced and rounded (Panama and South America) (Fig. 5) | |
| | <i>Chloronana</i> DeLong and Freytag (1964b) | |
| 8'. | Small, not exceeding 9 mm in length; head usually broader, not strongly produced; forewing with appendix | 9 |
| 9(8') | Entire forewing reticulate (South America) (Fig. 3) | |
| | <i>Reticana</i> DeLong and Freytag (1964c) | |
| 9'. | Only apical half of forewing usually reticulate, with reduced appendix or appendix absent (Fig. 7) | 10 |
| 10(9') | Appendix present but greatly reduced (North and Central America) (Fig. 6) | |
| | <i>Gyponana</i> (in part) Ball (1920) | |
| 10'. | Without appendix (Fig. 7) | 11 |
| 11(10') | Crown blunt, triangular, with definite margin, ocelli on median portion of crown (Chile) (Fig. 7) | |
| | <i>Chilenana</i> DeLong and Freytag (1967b) | |
| 11'. | Crown without definite margin, rounded to face, ocelli distant from eyes, on anterior portion of crown (Chile) (Fig. 14) | |
| | <i>Chilella</i> DeLong and Freytag (1967b) | |



- 12(5'). Pronotum strongly declivous, usually convexly rounded to head; head often appearing almost ventral to pronotum (Fig. 11) 13
- 12'. Pronotum not strongly declivous, usually flat or gently sloping (Fig. 8) 19
- 13(12). Scutellum bearing a prominent tubercle at center (South America) (Fig. 11)
..... *Tuberana* DeLong and Freytag (1971)
- 13'. Scutellum without tubercle or if present very small (Fig. 13) 14
- 14(13'). Head short, parallel margined, about seven times as broad as median length (Fig. 15) 15
- 14'. Head with margins roundedly produced at middle, or if parallel margined not more than four times as broad as median length (Fig. 15) 16
- 15(14). Lateral margins of pronotum produced and angled, spine-like (South America) (Fig. 15)
..... *Flexana* DeLong and Freytag (1971)
- 15'. Lateral margins of pronotum not produced into spinelike projections (Fig. 12)
..... *Declivara* DeLong and Freytag (1971)
- 16(14'). Small, length not more than 7.5 mm (Central and South America) *Acuponana* DeLong and Freytag (1970)
- 16'. Larger, more than 9 mm in length 17
- 17(16'). Crown with distinct margin (Fig. 16) 18
- 17'. Crown rounded to face, without a distinct margin (Central and South America) (Fig. 13)
..... *Scaris* Lepeltier and Serville (1825)
- 18(17). Pronotum angled with scutellum; crown a continuation of slope of pronotum, eyes small, margin of crown abruptly, roundedly produced from median margin of eye, ocelli near middle of crown (South America) (Fig. 19)
..... *Clinonella* DeLong and Freytag (1971)

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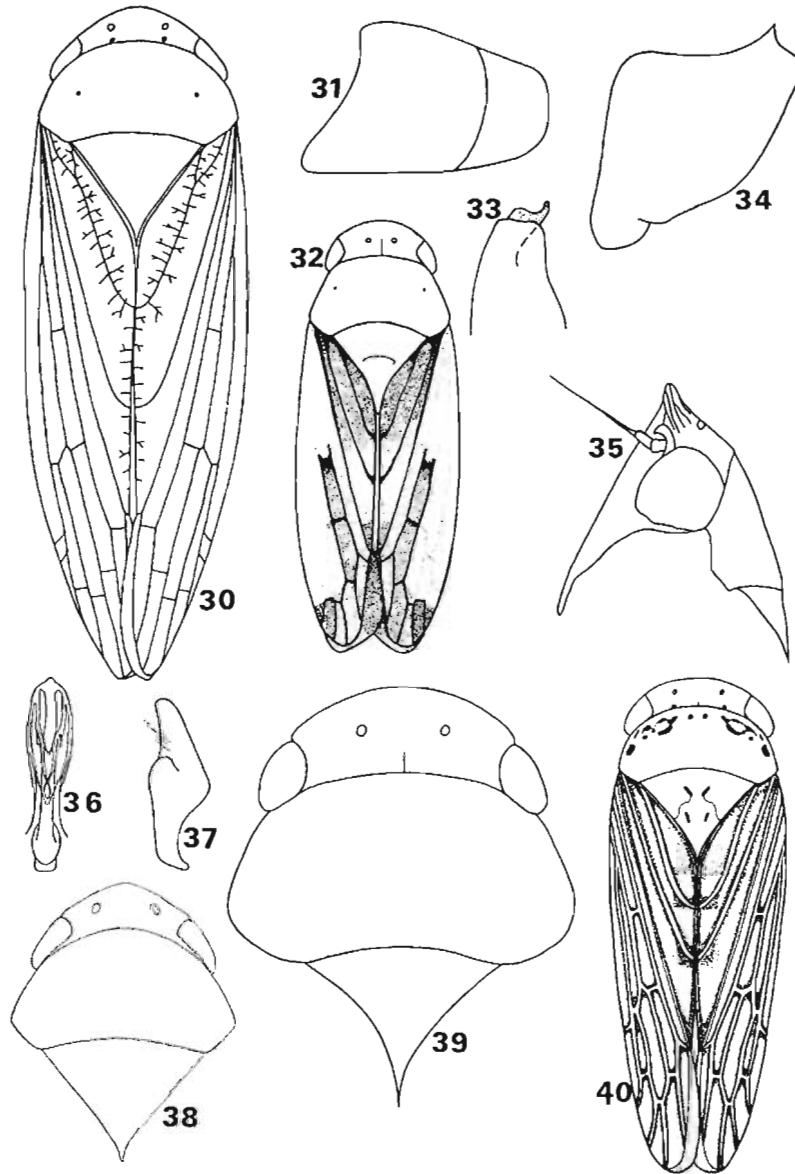
FIGS. 1-15. 1. *Sulcana carinata* DeLong and Freytag, head, pronotum, scutellum, dorsally. 2. *Coelogypona venosella* DeLong and Freytag, head, pronotum, scutellum, dorsally. 3. *Reticana lineata* (Burm.), body, dorsally. 4. *Zonana alera* DeLong and Freytag, body, dorsally. 5. *Chloronana olivacea* (Spang.), body, dorsally. 6. *Gyponana brevispina* DeLong and Freytag, body, dorsally. 7. *Chilenana chilena* DeLong and Freytag, body, dorsally. 8. *Gypona glauca* (F.), head, pronotum, scutellum, laterally. 9. *Dragonana dracontea* (Gibson), body, dorsally. 10. *Rugosana rugosa* (Spang.), body, dorsally. 11. *Tuberana tubera* DeLong and Freytag, head, pronotum, scutellum, laterally. 12. *Declivara ornamenta* DeLong and Freytag, head, pronotum, scutellum, dorsally. 13. *Polana resima* (Fowler), head, laterally. 14. *Chilella rugella* DeLong and Freytag, head, pronotum, scutellum, dorsally. 15. *Flexana spinosa* DeLong and Freytag, head, pronotum, scutellum, dorsally.



- 18'. Pronotum convexly rounded from scutellum; crown concavely rounded, eyes larger, margin of crown gradually, roundedly produced from inner front margin of eyes, ocelli on basal third of crown (South America) (Fig. 17)
..... **Folicana** n.g.
- 19(12'). Crown acutely angled with face, with a definite margin, often foliaceous or subfoliaceous (Fig. 8) 20
- 19'. Crown blunt, without a definite margin, thick, merging with face or rounded to face (Fig. 13) 30
- 20(19). Size large, 15-18 mm in length 21
- 20'. Smaller, not exceeding 14 mm in length 22
- 21(20). Robust; margin of crown thick, crown broadly roundedly produced, more than twice as wide as median length (South America) (Fig. 26) *Rhogosana* Osborn (1938)
- 21'. Elongate, slender; margin of crown subfoliaceous, crown strongly produced, rounded, three-fourths as long at middle as basal width between eyes (South America) (Fig. 18)
..... *Gypona (Paragypona)* DeLong and Freytag (1964c)
- 22(20'). Slender, elongate; crown produced, bluntly pointed, conical (Central and South America) (Fig. 25) **Acuera** n.g.
- 22'. Broader; crown flat or concavely rounded, if strongly produced apex flat, more broadly rounded (Fig. 8) 23
- 23(22'). Head as broad as pronotum, margin of gena strongly sinuated, surfaces of crown coarsely rugose (Fig. 20)
..... *Prairiana* Ball (1920)
- 23'. Head at least slightly narrower than pronotum, margin of gena feebly sinuated, if partly rugose then rugae relatively fine (Fig. 21) 24
- 24(23'). Crown and pronotum with numerous shallow pits, pits usually pigmented 25
- 24'. Crown and pronotum without pits 26
- 25(24). Crown strongly produced, more than half as long at middle as basal width between eyes, margin foliaceous (Figs. 22, 23) *Negosiana* Oman (1949)
- 25'. Crown weakly produced, more than twice as wide between

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FIGS. 16-29. 16. *Folicana nota* DeLong and Freytag, head, pronotum, scutellum, laterally. 17. Same, dorsally. 18. *Gypona thoracica* (F.), head pronotum, scutellum, laterally. 19. *Clinonella declivata* (Osborn), head, pronotum, scutellum, laterally. 20. *Prairiana cinerea* (Uhler), face, genae, ventrally. 21. *Gyponana scrupulosa* (Spang.), face, genae, ventrally. 22. *Negosiana fraterna* Spang., head, pronotum, scutellum, dorsally. 23. Same, laterally. 24. *Acuera adspersa* (Stål), head, pronotum, scutellum, laterally. 25. Same, dorsally. 26. *Rhogosana rugulosa* Osborn, head, pronotum, scutellum, laterally. 27. *Acuera paga* DeLong and Freytag, body, dorsally. 28. *Curtara samera* DeLong and Freytag, head, pronotum, scutellum, dorsally. 29. Same, laterally.



FIGS. 30-40. 30. *Hamana dictatoria* (Gibson), body, dorsally. 31. *Gypona verticalis* (Stål), pygofer, laterally. 32. *G. glauca* (F.), body, dorsally. 33. *Acusana veprecula* DeLong, pygofer, laterally. 34. *Hamana incita* (V.D.), pygofer, laterally. 35. *Costanana cella* DeLong and Freytag, head, pronotum, scutellum, laterally.

- eyes at base as median length, margin thin, not foliaceous (Figs. 28, 29) **Curtara** n.g.
- 26(24'). Appendix of forewing greatly reduced, greatest width distinctly less than width of base of first apical cell, apex of forewing frequently reticulately veined (North, Central, South America) (Fig. 6) *Gyponana* Ball (1920)
- 26'. Appendix of forewing not reduced, widest at a point about opposite apex of first apical cell, greatest width usually equaling or exceeding width of base of first apical cell, forewing not reticulate veined (Figs. 27, 30) 27
- 27(26'). Male pygofer with spine, blunt protrusion, hooked spines or flattened plate on dorsocaudal margin (Figs. 33, 34) 28
- 27'. Male pygofer smooth or rounded on dorsocaudal margin (Fig. 31) 29
- 28(27). Male pygofer bearing a caudal, short, apical spine or blunt protrusion; aedeagus base, dorsal processes paralleling shaft to apex (Fig. 34) *Hamana* DeLong (1942)
- 28'. Male pygofer bearing a caudal hooked spine or flattened plate; aedeagus with shaft only, without basodorsal processes (Fig. 33) *Acusana* DeLong (1942)
- 29(27'). Crown weakly produced, rounded, twice or more as broad as long; forewing with yellow band on basal half or two-thirds of costa; male plates elongate, tapered to pointed apices (Central and South America) (Figs. 39, 50) **Costanana** n.g.
- 29'. Crown strongly produced, rounded, two-thirds as long as broad; forewings without yellow, costal bands; male plates often broad, usually rounded apically (North, Central, South America) (Fig. 32) *Gypona* Germar (1821)
- 30(19'). Small, green, 6 mm or less in length; terminal processes of aedeagus divided and redivided (Fig. 36) *Ponanella* DeLong and Freytag (1969b)
- 30'. Larger, usually more than 6 mm in length; terminal processes if present not divided and redivided 31
- 31(30'). Head distinctly narrower than pronotum, median length of crown much greater than length next to eye; lateral margins of pronotum converging anteriorly; aedeagus with a pair of basodorsal processes forming sheath for shaft (North, South, Central America) (Fig. 38) *Ponana* Ball (1920)

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36. *Ponanella rubravenosa* DeLong and Freytag, aedeagus, ventrally. 37. *Marganana equata* DeLong and Freytag, style, ventrally. 38. *Ponana citrina* (Spang.), head, pronotum, scutellum, dorsally. 39. *Costanana cella*, head, pronotum, scutellum, dorsally. 40. *Marganana suilla* (Ball), body, dorsally.

- 31'. Head as wide or nearly as wide as pronotum, crown broadly rounded anteriorly, parallel margined or slightly longer at middle than next to eye; lateral margins of pronotum not strongly converging anteriorly; aedeagus without basolateral processes (except in some *Polana*) (Fig. 40) 32
- 32(31'). Crown merging with face, anterior portion of head subangular, ocelli equidistant from eyes and median line (Fig. 40) 33
- 32'. Crown rounding to face, ocelli nearer to eyes than to median line (Fig. 15) 34
- 33(32). Crown longer at middle than next eye; styles of male short or robust without conspicuous excavations (North, Central, South America) (Figs. 37, 40)
..... *Marganana* DeLong (1948)
- 33'. Crown parallel margined, length at middle no greater than length at eye; male styles usually deeply, concavely excavated or notched (Figs. 61, 66) **Culumana** n.g.
- 34(32'). Size large, robust, 10 mm or more in length
..... *Scaris* Lepeltier and Serville (1825)
- 34'. Size smaller, less than 9 mm in length
..... *Polana* DeLong (1942)

Genus **Folicana** n.g.

(Figs. 16, 17)

Head rather strongly produced and rounded, crown twice as wide between eyes at base as median length with deep furrows, rugose, ocelli depressed, closer to proximal eye than to each other. Crown depressed just behind anterior margin, angled with front, margin thin not foliaceous. Pronotum elevated, posteriorly, rapidly sloping to crown. Pronotum and apical half of scutellum with conspicuous transverse striae.

Type species: *Folicana nota* n.sp.

Related to *Rhogosana* and *Clinonella*, *Folicana* is intermediate in the declination of pronotum between these two genera.

Folicana nota n.sp.

(Figs. 16, 17, 41-44, 46, 51)

Length of male 12.5 mm; female 14 mm. Crown roundedly produced, more than twice as wide between eyes at base as median length. Color: variable in pattern and intensity. Crown pale brown with darker brown next eyes and above margin. Pronotum brown, usually darker brown on median half. Scutellum pale brown with darker brown longitudinal stripes or areas. Forewing pale brown with numerous dark brown markings between veins.

Male genitalia with plates more than three times as long as broad, widest subapically, apex narrowed, blunt, rounded. Style with blade

tapered toward apex; apical fourth bent dorsally, apex slightly concave between dorsal and ventral marginal teeth. Aedeagus tapered from base to apex, basal two-thirds thick, bearing a pair of apical spines on dorsal surface. A pair of lateral spines one-fourth length of shaft arising at three-fourths length of shaft and curving laterally and basally. A pair of processes more than one-half length of shaft arising from basodorsal recurved portion of shaft, extending ventrally each side of shaft, then curving apically. Pygofer spine broader than long; apex narrowed, blunt, serrate, bent inwardly.

Female genitalia with seventh sternum with produced rounded lateral angles, posterior margin between angles roundly excavated each side of a slightly produced median lobe, lobe more than half width of segment and slightly, roundly notched at middle.

Types: Holotype male Piracicaba, Sao Paulo, Brazil 3/2/66 (C. A. Triplehorn). Allotype female, same data as holotype. Paratypes: 1 ♂ same data as holotype; 2 ♀ Igarape, Belem, Rio Solimoes 4/7-30/66 (Malkin); 1 ♀ Bolivia, Dept. Santa Cruz, Prov. San Esteban Mururina, 49 km N Santa Cruz 10/2/59, 1120 ft elev (H. B. Cumming); 4 ♀ Guyane, Maroni; 1 ♀, 2 ♂ Hacienda Maria, Cusca, Peru 2/22/52 (F. L. Woytkowski); 1 ♀ Brit. Guiana, Upper New River, 700 ft 1/21/38 (C. A. Hudson); 1 ♂ Collanga, Paucartambo Prov. Dept. Cusca, Peru 2/19/52 (F. L. Woytkowski); 2 ♂ Chauchamayo, Peru, from W. F. H. Rosenberg; 1 ♂ Peru, Junia, Sani Beni rain forest 1939 (F. Woytkowski); 1 ♂ Tingo Maria, Peru 10/46 (W. Woyrauch) WKW 1292.670 m; 1 ♂ Lower Rio Tapiche, Peru 7/27, F 6155. Holotype, allotype and paratypes in the DeLong Collection. Paratypes in the U. S. National Museum, the British Museum of Natural History, the North Carolina State University, the American Museum of Natural History and the Museu de Zoologia de Universidade de Sao Paulo, Brazil.

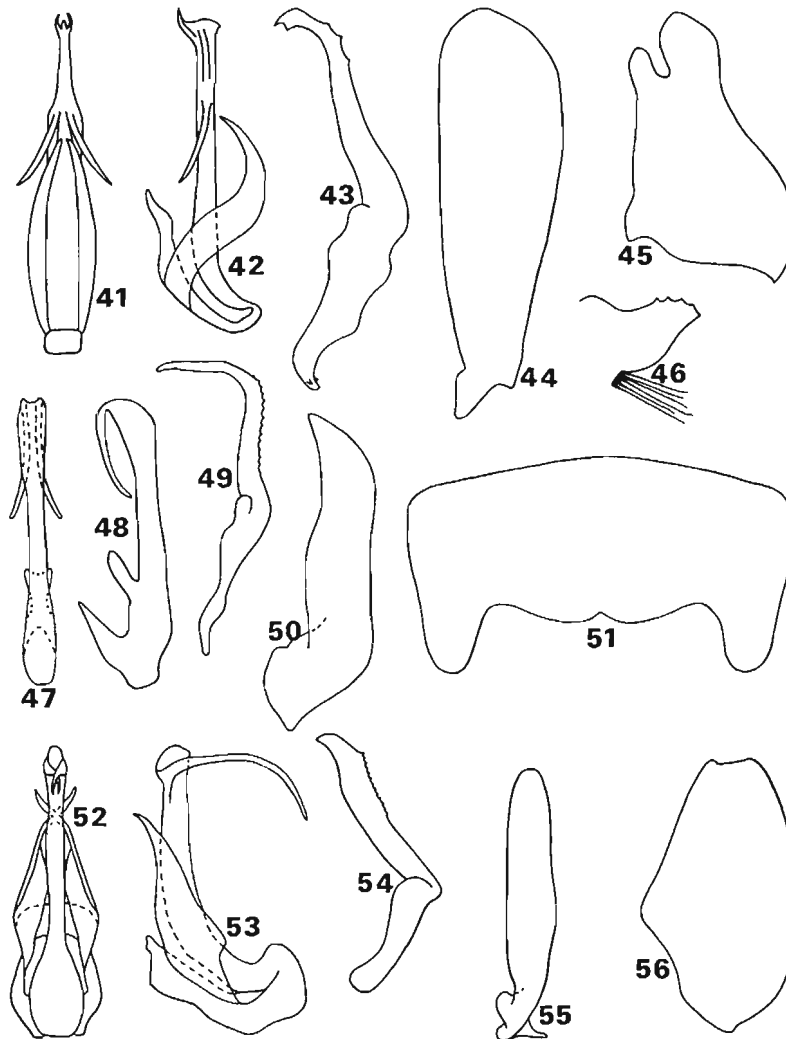
Genus *Costanana* n.g.
(Figs. 35-39)

Head broadly roundly produced, crown more than twice as broad between eyes at base as median length, with deep transverse striae angled with front, margin thin, not foliaceous. Ocelli more than twice as distant from each other as either is from proximal eye.

In color the species of this genus are brown, usually dark brown with a round black spot on pronotum one behind each eye at half the length of pronotum. Forewings uniform brown except costal margin which is broadly yellow on basal half or two-thirds, occasionally interrupted at middle.

Type species: *Costanana dunda* n.sp.

Costanana is related to *Gypona* but differs from the species of that genus by the smaller size, comparatively broader head, less prominent humeral angles of pronotum and long narrow pointed male plates.



FIGS. 41-56. Figs. 41-44, 46, 51, *Folicana nota* DeLong and Freytag. 41. Aedeagus, ventrally. 42. Aedeagus, laterally. 43. Style, laterally. 44. Plate, ventrally. 46. Pygofer spine, laterally. 51. Female seventh sternum, ventrally. Figs. 45, 47-50, *Costanana dunda* DeLong and Freytag. 45. Pygofer, laterally. 47. Aedeagus, ventrally. 48. Aedeagus, laterally. 49. Style, laterally. 50. Plate, ventrally. Figs. 52-56, *Acuera adspersa* (Stål). 52. Aedeagus, ventrally. 53. Aedeagus, laterally. 54. Style, laterally. 55. Plate, ventrally. 56. Pygofer, laterally.

Costanana dunda n.sp.

(Figs. 45, 47-50)

Length of male 7 mm; female unknown. Crown broadly, roundly produced, almost twice as wide between eyes at base as median length. Color: brown with dark brown and yellow markings. Crown pale brown with a black line on margin; eyes and ocelli, red. Pronotum brown, a round black spot on each side behind eye at half the length of pronotum. Scutellum brown. Forewings brown, costal margin to apical cells broadly pale yellow, two pair of dark brown spots along commissure and a dark brown spot on costa at inner end of first apical cell. Face, yellow.

Male genitalia with plates almost four times as long as broad, apical fourth tapered to a bluntly pointed tip. Styles long and slender, the apical fifth bent at right angles, extending dorsally, slightly enlarged before apex, then tapered to a pointed tip. Aedeagal shaft median in size, enlarged just before apex, bearing a pair of terminal processes which arise dorsally and curve basally about half distance to base. Pygofer with a rounded apical portion beyond a sulcus and a finger-like process arising on dorsal surface at sulcus.

Types: Holotype male, labeled "Iguala, Gro., Mexico, DeLong, Good, Caldwell, Plummer" in the DeLong Collection.

Genus *Acuera* n.g.

(Figs. 24, 25)

Elongate with produced, bluntly angled crown, more than half as long at middle as basal width between eyes, disc convexly rounded; ocelli halfway between margin and base, nearer proximal eye than median line. Crown with definite margin, angled with front. Forewings with numerous cross veinlets. Aedeagus with paired processes arising from the basodorsal portion of shaft. Color yellowish with dark brown mottling on forewings.

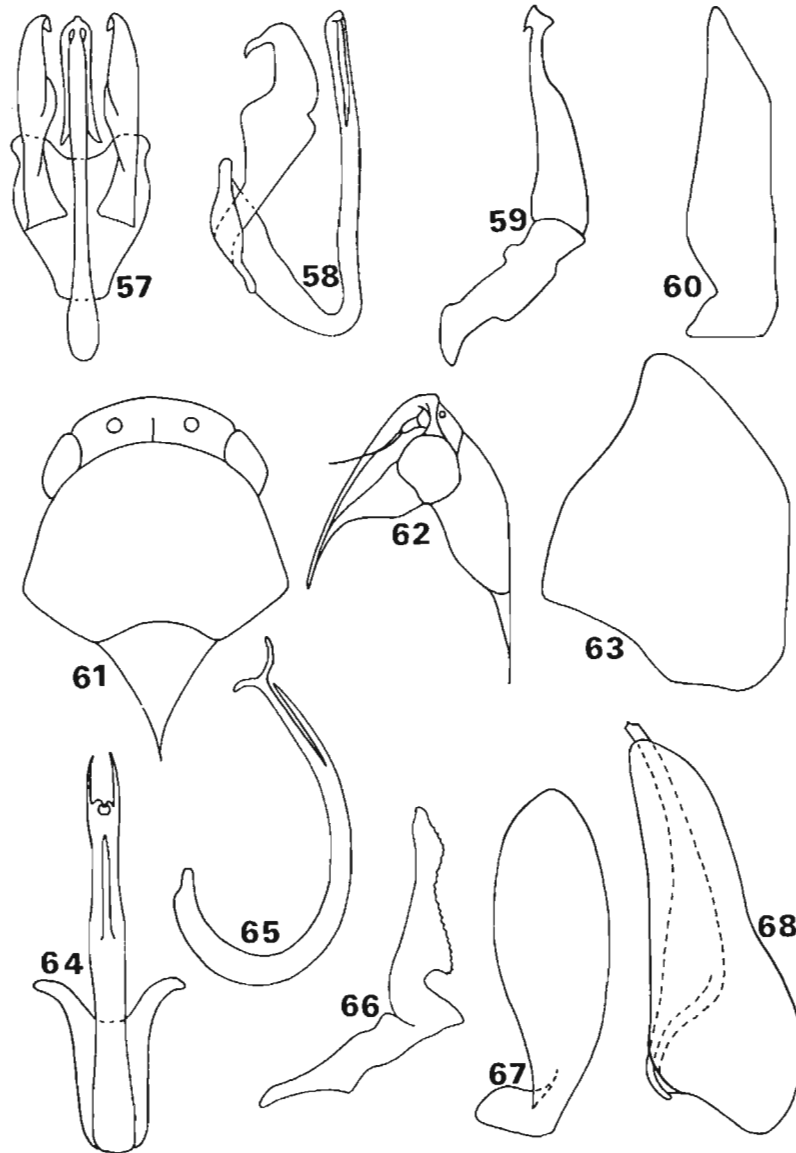
Type species: *Gypona adspersa* Stål.

Acuera adspersa (Stål)

(Figs. 24, 25, 52-56)

Length of male 12.5 mm; female 12.5 mm. Crown strongly produced, bluntly angled, two-thirds as long at middle as basal width between eyes. Color pale brown. Crown pronotum and scutellum heavily marked with brown punctate spots. Crown with a black spot at apex, black area around each ocellus, black spot each side at base. Pronotum with irregular black markings on anterior portion. Scutellum with dark brown basal angles. Forewings pale brown subhyaline, white areas along claval suture and along costal margin, alternated with dark brown maculations on costal margin.

Male genitalia with plates long, slender, five times as long as broad, apices rounded. Style slightly broadened at middle, ventral margin ser-



Figs. 57-68. Figs. 57-60, 63, *Curtara samera* DeLong and Freytag. 57. Aedeagus, ventrally. 58. Same, laterally. 59. Style, laterally. 60. Plate, ventrally. 63. Pygofer, laterally. Figs. 61-62, *Culumana fascia* DeLong and Freytag. 61. Head, pronotum, scutellum, dorsally. 62. Same, laterally. Figs. 64-68, *Culumana torqua*.



FIGS. 69-70. Comparison of femoral setal formulae. 69. *Coelogypona* and *Sulcana*, 2-2-1-1. 70. Other gyponine genera, 2-2-1.

rate on apical half, apex narrowed, bluntly pointed. Aedeagal shaft bearing a long subapical process each side, extending ventrad and basad. Paired processes arising from the basodorsal portion of shaft, broad at base, tapered to pointed apices, extending almost to apex of shaft.

Female genitalia with lateral angles of seventh sternum broadly rounded, scarcely produced, posterior margin slightly concavely excavated.

Types: Holotype female, from Brazil, in the Stockholm Museum. Allotype male, Karlingdale Matta Grossa, Porta Velho, Brazil 8/21/43 (Mark Taylor), in the North Carolina State University Collection.

In addition to the type specimens, material from Brazil and Argentina are at hand. The male has not previously been described.

Genus *Curtara* n.g.

(Figs. 28, 29)

Crown short, broadly rounded, only slightly produced, about twice as wide between eyes at base as median length, margin distinct, thin, acutely angled with front, ocelli closer to median line than to proximal eye. Crown sloping, not flat and foliaceous as in *Prairiana*. Forewing with additional costal cross vein. Aedeagus with pair structures arising from basodorsal recurved portion of shaft. Color variable, usually buff or pale brown with dark brown markings. Size variable, usually from 7 to 10 mm.

Type species: *Curtara samera* n.sp.

Curtara samera n.sp.

(Figs. 28, 29, 57-60, 63)

Length of male 7-7.5 mm; female 7.5-8 mm. Crown broadly rounded, more than twice as wide between eyes at base as median length. Ocelli closer to median line than to proximal eye. Crown angled with

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DeLong and Freytag. 64. Aedeagus, ventrally. 65. Same, laterally. 66. Style, laterally. 67. Plate, ventrally. 68. Pygofer, laterally.

face with definite margin. Color buff, crown pronotum and scutellum pitted, brown spots in pits. In well marked specimens scutellum with black spots in basal angles. Forewings buff subhyaline with irregular dark brown markings.

Male genitalia with plates three and one half times as long as broad, apex bluntly pointed. Style with blade broad at base narrowed on apical third to enlarged apical head with curved dorsal surface and pointed apex. Aedeagal shaft with two long slender apical processes, one-third length of shaft, extending basad. Paired processes arising from baso-dorsal portion of aedeagal shaft broadened at middle, excavated on dorsal margin of apical third, curved apically to form a narrow, elongated, pointed apex.

Female genitalia with lateral angles of seventh sternite scarcely produced, broadly rounded to posterior margin which is broadly but slightly concavely excavated.

Types: Holotype male Piracicaba, Sao Paulo, Brazil 12/8/65 (C. A. Triplehorn). Allotype, same data as holotype except 11/10/65. Paratypes labeled: 2 ♂ same data as holotype; 2 ♂ same data as allotype; 1 ♂ same except 2/65; 12 ♂, 1 ♀ same as holotype except 11/8/65; 10 ♂, 2 ♀ same as holotype except 11/3/65; 1 ♂ same as holotype except 9/2/64; 2 ♂, 2 ♀ same as holotype except 9/16/64; 1 ♂ same as holotype except 10/17/64; 12 ♂, 1 ♀ same as holotype except 2/11/66; 3 ♂ same as holotype except 12/16/65; 5 ♂, 2 ♀ same as holotype except 12/4/65; 14 ♂, 3 ♀ same as holotype except 11/16/65; 2 ♂, 1 ♀ same as holotype except 12/22/65; 2 ♂ same as holotype except 3/23/66; 1 ♂, 2 ♀ same as holotype except 3/2/66; 2 ♂ same as holotype except 1/20/66; 12 ♂, 1 ♀ Nova Tentonia, Santa Catalina, Brazil 4/20/54 (F. Plaumann); 1 ♂, 1 ♀ Rio Caraguata, Matto Grosso, Brazil 3/53 (F. Plaumann); 4 ♂ Loreto Misiones, Arg. 12/6/31 (A. A. Ogoblin); 1 ♂ Brazil, April, C. F. Baker Collection; 6 ♂ Isla de Ore, Formosa, Arg. 4/38; 2 ♂ Estancia, Amello, Camino. Zapallar, Chaco, Arg. 3/10-15/59; 2 ♂ Corrienter, Arg. 2/15-30/59 (M. Biraden) Coll.; 5 ♂ Saenz pena Chaco, Arg. 3/26/39 (P. Denier); 1 ♂ Sa Carldoa, Cordoba, Arg. 1/19/44; 1 ♂ Tilcara Jujuy, Arg. 9/11/44 (M. Biraden); 1 ♂ Capilla de los Remedias, Arg. 8/19/39 R. Madonado (Bruzzone); 2 ♂ Resistencia Chaco, Arg. 3/20/39 (M. Morinigo); 4 ♂ San Francisco, Cordoba, Arg. 1/21/40 (Biraden), Museo de La Plata; 1 ♂ Reconquisto, Santa Fe 11/26/39 (Biraden, Bizzi), Museo de La Plata; Lumbreras, Salta 3/14/39 (Biraden, Scott) leg, Museo de La Plata; 1 ♂ Oran Vespucio, Salta, Argentina 12/58 (R. N. Orfila); 1 ♂ Machenna, Cordoba, Arg. 2/28/41 (M. Biraden), Museo La Plata; 1 ♂ Tapia Tucuman, Arg. 4/8/47 (R. Madonada, Bruzzone); 1 ♂ El Tabacal 6/25 Museo La Plata; Jose C. Paz. Bs. As. 1940 (J. A. Rosas, Costa) leg. Museo La Plata; 1 ♂ Andalgala Cotomorca 3/3/39 (Biraden-Scott) leg. Museo La Plata; 1 ♂ Chaco 3/39 N. Parko leg, Museo La Plata.

Holotype, allotype and paratypes in the DeLong Collection. Para-

types in the Collection of The Ohio State University, the North Carolina State University, the U. S. National Museum, the American Museum of Natural History, the La Plata, Argentina Museum and the Stockholm Museum.

Genus **Culumana** n. g.

(Figs. 61, 62)

Robust, crown broad, broadly rounded, almost parallel margined, about three times as broad as long, blunt, merging with front, without a definite margin. Ocelli large, near front of crown, nearer eyes than median line. Venation simple, without claval crossveins. Styles usually excavated on ventral margin or irregularly shaped. Aedeagus with simple shaft, without processes from recurved basodorsal portion.

Coloration dark brown, anterior portion of crown yellowish, dark brown between eyes, appearing brown banded.

Type species: *Culumana torqua* n. sp.

Culumana torqua n. sp.

(Figs. 64-68)

Length of male 10.5 mm; female unknown. Crown broad, rounded, scarcely produced at middle, almost parallel margined, about three times as broad as long, blunt. Ocelli depressed, near front of crown. Color buff, crown with portion behind and between ocelli brown, darker anteriorly. Pronotum buff with irregular brown markings behind eyes and along anterior margin; posterior portion and disc brown. Scutellum buff with dark brown basal angles, broad central portion including apical angle, brown. Forewings brown, black spots on crossveins on disc.

Male genitalia with plates elongate more than three times as long as broad. Style with blade deeply roundly notched on ventral margin near base, slightly broadly excavated on dorsal and ventral margins at two-thirds length, of blade and again just before narrow blunt apex. Aedeagal shaft curved, narrow with two pairs of short processes at apex, one pair extending apically, the shorter pair curving dorsad. A slender finger-like portion arises on ventral margin at two-thirds length of shaft, extending apically along shaft to apex. Pygofer long with a long plate-like structure on dorsal portion beneath pygofer wall, extending slightly beyond pygofer apex.

Types: Holotype male Sinchono, Peru, 1943, J. G. Sanders. Paratypes: 1 ♂ same data as holotype; 1 ♂ Tingo Maria, Huanuco, Peru 11/8/39 (Woytkoski). Holotype and paratype in the DeLong Collection, paratype in the California Academy of Science Collection.

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