

THE OHIO JOURNAL OF SCIENCE

Vol. 69

MAY, 1969

No. 3

STUDIES OF THE WORLD GYPONINAE (HOMOPTERA: CICADELLIDAE)

A SYNOPSIS OF THE GENUS *CLINONARIA*^{1, 2}

DWIGHT M. DeLONG

The Ohio State University

AND

PAUL H. FREYTAG

The University of Kentucky

ABSTRACT

The Genus *Clinonaria* was described by Metcalf in 1949 and contains large leafhoppers, 10 to 16.5 mm in length. They are all tropical, occurring in Central and South America, and are associated with jungle vegetation. Seventy four species are placed in this genus; twelve, previously described in four other genera, are *Scaris picea* Walker, *Darma bipunctata* Walker; *Gypona marmorata* and *G. alboguttata* Spangberg; *Gypona hebes* and *G. decorata* Fowler; *Ponana affinula*, *P. bicolorata*, *P. grossa*, *P. notatula*, *P. sarana*, and *P. sulfurea* Osborn. The other sixty-two species are described as new species of *Clinonaria*. The type species of the genus was designated as *C. bicolor* Metcalf, which is a synonym of *P. bicolorata* Osborn. Keys are provided for both males and females, and 368 figures are used as an aid in identification.

ACKNOWLEDGEMENTS

The task of monographing the World Gyponinae could not have been accomplished without the assistance and cooperation of several persons and the opportunity to study types and other specimens in several important world museums and University collections.

Through the kindness of Dr. W. E. China and Mr. R. J. Izzard, the Walker and Fowler types were studied in the British Museum of Natural History. More recently we have been assisted by Dr. W. J. Knight. Dr. Eric Kjellander has kindly permitted the study of all the Spangberg and Stal types in the Stockholm Museum, and Dr. Max Beier, a detailed study of the Spangberg types in the Vienna Museum.

The material in the U. S. National Museum has been made available for study by Dr. James Kramer. The Metcalf types and a large quantity of unidentified material in the North Carolina State College collection have been loaned by Dr. David Young. The types in the Carnegie Museum were loaned by Dr. George Wallace. The types in The Ohio State University collection were studied by the permission of Dr. Charles Triplehorn.

Other sources of material have been the University of Kansas (Dr. George Byers); the California Academy of Science Collection (Dr. Don. C. MacNeill);

¹This work was supported by and publication partially financed by the National Science Foundation Grant GB5659X.

²Manuscript received June 8, 1968.

the American Museum of Natural History (Dr. Herbert Ruckes, Sr.); the University of Michigan (Dr. T. E. Moore); the Michigan State University (Dr. Roland Fischer); the Department de Zoologia, Secretaria da Agricultura collection, Sao Paulo, Brazil (Dr. Hans Reichardt Filho and Henrique M. Canter); the Universidad de Concepcion, Chile, Instituto Central de Biologia collection (Dr. Jorge N. Artigas and Tomas Cekalovic); and the collection de Estacion Experimental Agronomica, Maipu, Chile (Dr. Roberto Gonzalez, Raul Cortes, and Luis R. Pena). Specimens and types of many species of north Central and South American Gyponinae were supplied by the DeLong Collection.

To all of those who have helped, whether by permission to study types, by loan of material, or by helpful suggestions, the authors express their sincere appreciation. Helpful suggestions and criticisms were offered by the editor and the reviewers of The Ohio Journal of Science.

INTRODUCTION

The Genus *Clinonaria* contains a group of large, robust leafhoppers, ranging in size from 10 to 16.5 mm. The genus was not described until 1949, when Z. P. Metcalf described *C. bicolor* and designated it as the orthotype of *Clinonaria*.

Seventy-four species are placed in *Clinonaria* at this time, twelve of which have previously been named and described under other generic names. Walker, in 1851, described *picea* in *Scaris* and, in 1858, *bipunctata* as a species of *Darma*. In 1878 Spangberg described *marmorata* and *albuguttata* in *Gypona*. Fowler in 1903 described six species, *notatula*, *grossa*, *sarana*, *bicolorata*, *sulfurea*, and *affinula*, placing all of these in *Ponana*. He also placed *marmorata* and *albuguttata*, two Spangberg species, in *Ponana*.

Clinonaria bicolor, described by Metcalf in 1949, is placed as a synonym of *P. bicolorata* (Osborn) at this time; consequently, *P. bicolorata*, because of its priority, now becomes the type species of the Genus *Clinonaria*.

Metcalf, in his catalogue of the Gyponidae in 1962, only placed *C. bicolor* in *Clinonaria*. Failing to recognize the generic affinity of these other described species, he placed *picea* and *bipunctata* in *Scaris*, *hebes* and *decorata* in *Gypona*, and the other eight species in *Ponana*.

Geographical Distribution

All species of *Clinonaria* are known to occur only in portions of Central and South America. How widely these are distributed and how many species belong to the genus cannot be determined at this time, because available material is inadequate and no collections have been made in large areas of several of these countries. The present study is based upon all available collections, including all of the material in the museums of North America, South America, and Europe, with a total of some 400 specimens representing seventy-four species. Most of this material is from Bolivia, Brazil, Panama, and Peru, simply because of the greater amount of collecting done in these countries. Other countries represented by specimens used in this study are British Guiana, Colombia, Ecuador, Guyana, Venezuela, and Costa Rica.

Representatives of this genus occur on tropical vegetation and are especially associated with tropical jungles. They appear to live normally in the jungle canopy and are difficult to collect in any abundance. Many other species undoubtedly occur under these conditions in other Central and South American countries and will certainly be collected in the future.

All known records of distribution are between Costa Rica on the north and Boliva on the south. Many of the specimens at hand bear labels which are greatly abbreviated or have inadequate locality data. In such cases, the data on the pin label has been quoted without an attempt to interpret it.

THE GENUS *Clinonaria* METCALF*Clinonaria* Metcalf, 1949, p. 277

Head bulbous, three-fourths width of pronotum. Crown short, usually four times as wide as long, with striae usually transverse between ocelli. Margin of crown broadly rounded or ridged but never foliaceous. Pronotum strongly declivous, convexly rounded to crown. Forewings with normal venation, held roof-like over abdomen; whole body robust, not flattened dorso-ventrally. Hind tibia with outer dorsal row of setae varying from simply a row of large primary setae to a row of large primary setae with smaller secondary setae between each pair of larger setae. Color mostly brown or fuscous with various color patterns of yellow or orange. Male plates ligulate. Connective variable but usually Y-shaped. Aedeagus stout, recurved, usually without aedalati; gonopore terminal.

In general, the members of this genus are very large and robust and share many characteristics with *Ponana* and *Polana*. It should, however, be considered the primitive genus of this group, with a round margin to the head. Most species here considered in the genus are probably relic populations.

Type species: *Ponana bicolorata* Osborn.

The genital structures of the males are sufficiently different to serve as good specific diagnostic characters. The pygofer may be simple or cleft, often with heavy pubescence and it may bear no spine-like processes or it may have any combination of spines, from one to three pairs. The most prevalent type of spine arises anteriorly and dorsally beneath the pygofer wall and usually extends caudally. A second type of spine arises apically and may extend dorsally either beneath or outside of the pygofer wall. A third type of protrusion is a short, blunt, finger-like process, which arises anteriorly on the outside of the dorsal margin. The styles are more uniform in type, but in several species these may be broadened or enlarged and may bear protrusions on ventral or dorsal margins. The aedeagus may be a simple shaft or it may be variously modified, bearing one to three pairs of terminal spines, enlargements of the apical portion, long processes arising basally or laterally, or a combination of these characters. The plates may be long or short, slender or broad, and the apex may be pointed or rounded.

This genus can be distinguished from the other genera of Gyponinae by the large size; the robust, more cylindrical shaped body; the strongly declivous, convexly rounded pronotum; the crown rounded to front; and the row of alternate long and short spines on the hind tibia.

KEY TO MALES OF *CLINONARIA*

- | | | |
|----------------------|---|----------------------------------|
| 1. | Crown and pronotum uniformly bright yellow, unmarked, or dull yellow, with brown markings; tegmina brown..... | 2 |
| 1 ¹ . | Crown and pronotum brown with darker brown markings or with distinct color patterns of yellow, or with crown, pronotum, and tegmina brown, rather uniform in color..... | 24 |
| 2 (1). | Crown and pronotum bright or pale yellow, often with dark-brown coloration across apical portion of pronotum; tegmina brown; insects appearing distinctly bicolored..... | 3 |
| 2 ¹ . | Crown and pronotum dull or sordid yellow with dark-brown markings; tegmina brown but bicolored appearance not conspicuous..... | 13 |
| 3 (2). | Pygofer without spine arising at base on dorsal surface and extending beneath pygofer wall; style with a basad-directed spine on dorsal margin (Figs. 3, 5)
<i>bicolorata</i> (Osborn) p-136 | |
| 3 ¹ . | Pygofer with a spine arising at base on dorsal surface and extending beneath pygofer wall; style without spine on dorsal margin (Figs. 10, 50, 65)..... | 4 |
| 4 (3 ¹). | Pygofer spine long, extending more than three-fourths the width of pygofer, almost to ventral margin (Fig. 65)..... | <i>bipunctata</i> (Walker) p-142 |
| 4 ¹ . | Pygofer spine shorter than above, extending not more than half the distance to ventral margin (Figs. 15, 50)..... | 5 |
| 5 (4 ¹). | Aedeagus blunt at apex, without lateral processes at or near apex. (Figs. 6, 7, 8)
<i>phalos</i> n. sp. p-136 | |
| 5 ¹ . | Aedeagus variable, with a pair of lateral processes at or near apex (Figs. 11, 46, 61)... | 6 |

- 6 (5¹). Style enlarged on apical third; apex tapered, pointed (Fig. 18) . . . *defecta* n. sp. p-138
- 6¹. Style slender and/or tapered on apical third (Fig. 13) 7
- 7 (6¹). Aedeagus slender, elongate in lateral and ventral aspects; style long, slender, and strongly curved (Figs. 11, 12, 13) *pubescens* n. sp. p-138
- 7¹. Aedeagus broad in lateral view, at least on basal half; shaft shorter; style shorter, greatly curved (Figs. 32, 37, 42, 47) 8
- 8 (7¹). Aedeagus apex appearing blunt and rather broad in ventral view (Figs. 21, 36, 46) . . . 9
- 8¹. Aedeagus apex narrowed or tapered in ventral view (Figs. 26, 31, 41) 11
- 9 (8). Aedeagus in lateral view with apical third narrow; subapical spines very short, at base of apical enlargement; plates narrow, only slightly wider at base (Figs. 22, 24) *crinatana* n. sp. p-138
- 9¹. Aedeagus in lateral view with apical third broader; subapical spines longer than above; plates broadened at base (Figs. 42, 46, 49) 10
- 10 (9¹). Pygofer spine about one-half width of pygofer; aedeagus in lateral aspect more than twice as wide near base as width near apex (Figs. 50, 47) . . . *selana* n. sp. p-141
- 10¹. Pygofer spine about one-third the width of pygofer; aedeagus in lateral aspect less than twice as wide at base as width near apex (Figs. 40, 37) . . . *volata* n. sp. p-140
- 11 (8¹). Aedeagus distinctly enlarged just before apex (Fig. 32) *fimbriella* n. sp. p-140
- 11¹. Aedeagus more uniform in width near apex (Figs. 27, 42) 12
- 12 (11¹). Aedeagus apex narrow; lateral processes arising at apex (Figs. 26, 27) *ornata* (Osborn) p-140
- 12¹. Aedeagus apex broader; lateral processes distinctly subapical (Figs. 41, 42) *bivola* n. sp. p-141
- 13 (2¹). Pygofer with spine-like projections from caudal or dorsal margins, which do not project into pygofer cavity (Figs. 70, 140, 260) 14
- 13¹. Pygofer without spine-like projections, except spines projecting inside pygofer cavity (Figs. 60, 290) 17
- 14 (13¹). Pygofer process arising on dorsal margin near spine, extending into pygofer cavity; lateral processes of aedeagus bifid (Figs. 140, 136, 137) . . . *decorata* (Fowler) p-154
- 14¹. Pygofer process arising ventrocaudally; lateral processes not bifid (Figs. 260, 305, 256, 301) 15
- 15 (14¹). Pygofer caudal process longer than pygofer, slender, directed dorsally (Fig. 305) . . . 16
- 15¹. Pygofer caudal process short, not more than one-fourth the width of pygofer, thick (Fig. 260) *maculosa* n. sp. p-168
- 16 (15). Style broader on basal two-thirds, apical portion of aedeagus almost as broad as long (Fig. 68) *hebes* (Fowler) p-144
- 16¹. Style broadened on apical half; apex slender; apical portion of aedeagus three times as long as broad (Fig. 303) *vulgata* n. sp. p-174
- 17 (13¹). Pygofer with dorsal spine extending beneath pygofer wall (Figs. 265, 60, 335) 18
- 17¹. Pygofer without dorsal spine (Figs. 290, 170, 75) 20
- 18 (17). Pygofer spine extending beneath pygofer wall beyond caudal margin, spine curved and pointed at apex; aedeagus bearing five processes near apex (Fig. 265) *sida* n. sp. p-168
- 18¹. Pygofer spine short, about one-third the width of pygofer; aedeagus with fewer subapical processes (Figs. 60, 335, 56, 331) 19
- 19 (18¹). Aedeagal apical processes straight, extending apically on each side of shaft (Fig. 331) *conspicua* n. sp. p-177
- 19¹. Aedeagal apical processes curved, extending laterally and curved basad (Fig. 56) *exerata* n. sp. p-142
- 20 (17¹). Aedeagal subapical processes extending apically on each side of shaft (Figs. 286, 166) 21
- 20¹. Aedeagal subapical processes extending laterally or curved basad (Figs. 71, 171) . . . 22
- 21 (20). Aedeagus with one pair of subapical processes; aedeagal shaft tapered on apical fourth (Fig. 286) *peruwella* n. sp. p-172
- 21¹. Aedeagus with one pair of subapical processes; aedeagal shaft narrowed at apex only (Fig. 166) *sarana* (Osborn) p-157
- 22 (20¹). Aedeagus broad in lateral view; lateral processes subapical (Fig. 71) *notatula* n. sp. p-144
- 22¹. Aedeagus narrower on apical portion; lateral processes arising near apex (Figs. 171, 51) 23
- 23 (22¹). Aedeagus in ventral view blunt, rounded at apex; lateral processes transverse (Fig. 171) *affinula* (Osborn) p-158
- 23¹. Aedeagus in ventral view tapered, slender at apex; lateral processes extending laterally, curved basad (Fig. 51) *fida* n. sp. p-142
- 24 (1¹). Pronotum brown with distinct color patterns of yellow or with conspicuous paler areas 25
- 24¹. Crown, pronotum, and tegmina rather uniform brown in color, with various spots or markings; or crown and pronotum brown with darker brown markings 39

- 25 (24). Pronotum brown with three narrow, paler, transverse bands; aedeagus with two long blade-like processes arising near base and extending beyond apex of shaft
trifaciata n. sp. p-162
- 25'. Pronotum without transverse paler bands; aedeagus without blade-like processes arising near base. 26
- 26 (25'). Pronotum brown with irregular pale areas; without a definite color pattern on pronotum. *aurantium* n. sp. p-162
- 26'. Pronotum brown with a yellow "horseshoe-shaped" pattern extending from humeral angles along lateral margins and across anterior margin; or brown with a median pale longitudinal line extending across crown, pronotum, and scutellum. 27
- 27 (26'). Pronotum with yellow "horseshoe-shaped" pattern as above. 28
- 27'. Crown, pronotum, and scutellum brown, with a pale, median longitudinal line. 32
- 28 (27). Pygofer with a long straight, slender process arising on caudal margin and extending dorsally (Fig. 85). *supina* n. sp. p-146
- 28'. Pygofer with short "tooth-like" processes on caudal margin (Fig. 90). 29
- 29 (28'). Pygofer with a short "finger-like" process arising on dorsal margin of pygofer (Fig. 280). 30
- 29'. Pygofer without "finger-like" process, but with a blunt rounded protrusion (Fig. 90). *trispina* n. sp. p-146
- 30 (29). Aedeagus shaft constricted on dorsal margin at apex, then apex terminating in a pair of basally bent processes (Fig. 92). 31
- 30'. Aedeagus shaft with a narrow apical tip, processes arising laterally to apex (Figs. 276, 279). *diagonica* n. sp. p-170
- 31 (30). Pygofer spine extending under pygofer wall almost to caudal margin; dorsal projection thick, prominent (Fig. 270). *deseca* n. sp. p-170
- 31'. Pygofer spine extending about two-thirds the distance to caudal margin; dorsal projection shorter and narrower (Fig. 95). *flavella* n. sp. p-148
- 32 (27'). Pygofer with caudally arising process enlarged just before apex (Fig. 135)
supera n. sp. p-152
- 32'. Pygofer with caudally arising process not enlarged before apex. 33
- 33 (32'). Dorsal pygofer spine extending under pygofer wall, curved dorsally at apex (Fig. 130). 34
- 33'. Dorsal pygofer spine extending under pygofer wall, not curved upward at apex (Fig. 105). 36
- 34 (33). Dorsal pygofer spine only slightly curved at tip; aedeagus with two pairs of terminal processes (Fig. 96). *semota* n. sp. p-148
- 34'. Dorsal pygofer spine strongly curved at tip, extending above dorsal margin; aedeagus with three pairs of terminal processes (Figs. 125, 136). 35
- 35 (34'). Pygofer basodorsal process broad, strongly produced; aedeagal apical spines longer than subapical (Fig. 125). *flava* n. sp. p-150
- 35'. Pygofer basodorsal process shorter and narrower; aedeagal apical spines shorter than subapical (Figs. 130, 126). *excerta* n. sp. p-152
- 36 (33'). Plate rather broad near base, apex bluntly pointed; pygofer caudal process with bluntly pointed apex (Figs. 104, 105). *phaios* n. sp. p-149
- 36'. Plates more uniform in width, apex more blunt; pygofer caudal process with narrow, sharp-pointed apex. 37
- 37 (36'). Pygofer spine beneath pygofer wall extending to caudal spine; dorsal process short, narrow, finger-like (Figs. 109, 110). *ultra* n. sp. p-149
- 37'. Pygofer spine beneath pygofer wall shorter, not reaching caudal spine; dorsal process broader at base (Figs. 115, 120). 38
- 38 (37'). Aedeagus with two pairs of terminal processes arising near apex (Fig. 111)
zipha n. sp. p-149
- 38'. Aedeagus with one pair of terminal processes arising subapically (Fig. 116)
xantha n. sp. p-150
- 39 (24'). Pygofer with a long, slender spine arising on caudal margin and extending dorsally to or beyond the dorsal margin (Fig. 335). 40
- 39'. Pygofer without long, slender spine arising on caudal margin (Figs. 165, 225). 42
- 40 (39). Aedeagus shaft distinctly narrowed subapically, a pair of lateral processes arising at narrow portion of shaft (Fig. 352). *marmorata* (Spangberg) p-179
- 40'. Aedeagus not subapically constricted, a pair of lateral processes arising at apex or broadened portion of apex (Fig. 301). 41
- 41 (40'). Aedeagus with a pair of short, straight spines arising subapically and extending basad; style broadened on apical half to near slender apex (Figs. 301, 303)
vulgata n. sp. p-174
- 41'. Aedeagus with a pair of terminally arising, laterally extended spines, which are long and curve basad; style angularly enlarged on ventral margin at two-thirds its length, then tapered to elongate, slender apical portion (Figs. 306, 308)
laticephala n. sp. p-176
- 42 (39'). Pygofer with a spine arising on dorsal margin near base and extending beneath pygofer wall (Fig. 225). 43

- 42'. Pygofer without a dorsally arising spine (Figs. 75, 80)..... 59
- 43 (42). Pygofer spine long, extending almost to caudal margin (Figs. 165, 225, 275)..... 44
- 43'. Pygofer spine shorter, extending not more than half the distance to caudal margin (Fig. 315)..... 46
- 44 (43). Pygofer spine with a finger-like spur on dorsal margin at one-fourth its length; aedeagus without terminal processes (Figs. 225, 221)..... *caballa* n. sp. p-165
- 44'. Pygofer spine without dorsal spur; aedeagus with terminal processes (Figs. 165, 161)..... 45
- 45 (44'). Pygofer spine enlarged on basal half, apex slender, curved dorsally; aedeagus with short spine-like terminal and subapical processes (Figs. 165, 161)..... *sundara* n. sp. p-157
- 45'. Pygofer spine slender, apex spear-shaped; aedeagus with long terminal and subapical processes (Figs. 275, 271)..... *armata* n. sp. p-170
- 46 (43'). Aedeagus with one pair of long terminal processes, which extend laterally and curve basad (Fig. 311)..... *sidera* n. sp. p-176
- 46'. Aedeagus spines, if present, subapical (Figs. 156, 141)..... 47
- 47 (46'). Pygofer with a protruding short, finger-like process arising on dorsal margin and extending dorsally (Fig. 160)..... 48
- 47'. Pygofer without a protruding process on dorsal margin (Fig. 180)..... 49
- 48 (47). Style long and slender, a pair of slender processes arising on dorsal surface at four-fifths its length; aedeagus short, broad, with apex narrowed and bluntly rounded (Figs. 158, 156)..... *boliviana* n. sp. p-157
- 48'. Style without processes arising from shaft; aedeagus in lateral view broadly curved apically (Figs. 143, 141)..... *fusca* n. sp. p-154
- 49 (47'). Aedeagus with a pair of processes arising on lateral margins of shaft and extending apically on each side of shaft (Figs. 176, 181)..... 50
- 49'. Aedeagus without lateral processes arising on lateral margins of shaft (Figs. 146, 281, 296)..... 56
- 50 (49). Style broadened on apical half, apex sharp-pointed; lateral aedeagal processes arising at or before middle length of shaft (Figs. 198, 176)..... 51
- 50'. Style rather uniform in width on apical half; aedeagal lateral processes arising at two-thirds or more of length of shaft (Fig. 333)..... 55
- 51 (50). Aedeagal lateral processes arising not far from base (Fig. 196).... *lecta* n. sp. p-162
- 51'. Aedeagal lateral processes arising close to middle of shaft..... 52
- 52 (51'). Plate tapered from base to apex and scarcely broadened (Figs. 176, 191)..... 53
- 52'. Plate widened on outer margin basad to middle (Figs. 184, 189)..... 54
- 53 (52). Plate bluntly pointed at apex; style with apical half about uniform in width, almost to apex (Figs. 179, 178)..... *cirra* n. sp. p-158
- 53'. Plate narrowed, rounded at apex; style with central portion broadest, then tapered to a pointed apex (Figs. 193, 194)..... *sagula* n. sp. p-160
- 54 (52'). Aedeagal processes contiguous with shaft; tips divergent, not reaching to apex; style sloping to pointed apex (Fig. 181)..... *notha* n. sp. p-160
- 54'. Aedeagal processes separated from shaft, almost as long as shaft; style abruptly narrowed to pointed apex (Figs. 186, 188)..... *confusa* n. sp. p-160
- 55 (50'). Style long and slender; aedeagal lateral processes divergent, extending to apex of shaft (Figs. 333, 331)..... *conspecta* n. sp. p-177
- 55'. Style shorter, with tooth-like spines on ventral margin at apex; aedeagal lateral processes divergent, arising near apex and exceeding it in length (Figs. 323, 321)..... *superba* n. sp. p-177
- 56 (49'). Style long, slender, tapered to a pointed apex (Fig. 298)..... 57
- 56'. Style not long and slender, broadened at middle (Figs. 148, 153)..... 58
- 57 (56). Aedeagus with an enlarged head-like portion on apical third and distinctly notched at middle (Fig. 296)..... *toga* n. sp. p-174
- 57'. Aedeagus longer than in *toga* slightly enlarged at apex; apex broadly rounded, slightly incised at middle (Fig. 281)..... *ampula* n. sp. p-172
- 58 (56'). Style with a spine on ventral margin at two-thirds its length; aedeagus short, narrow, slightly enlarged at apex, incised at middle (Figs. 153, 151)..... *crina* n. sp. p-156
- 58'. Style without ventral spine; aedeagus with a broadly rounded apex and with spines extending basad and apically on each outer margin (Figs. 148, 146)..... *sentia* n. sp. p-156
- 59 (42'). Style with apex broadened, enlarged, triangular; apex tapered and pointed (Fig. 78)..... *sulfurea* (Osborn) p-144
- 59'. Style not triangularly enlarged at apex, slender but not tapered (Fig. 73)..... 60
- 60 (59'). Aedeagus gradually enlarged at apical fifth to form a pair of stout, transverse, subapical processes (Fig. 71)..... *notatula* n. sp. p-144
- 60'. Aedeagus without stout, transverse, subapical processes (Fig. 336)..... 61
- 61 (60'). Aedeagus with four spine-like apical processes (Fig. 336)..... *ungua* n. sp. p-179
- 61'. Aedeagus with not more than two apical processes (Fig. 236)..... 62

- 62 (61¹). Style with a head-like portion at apex (Fig. 238)..... *signa* n. sp. p-167
- 62¹. Style without a head-like structure at apex (Fig. 211)..... 63
- 63 (62¹). Style enlarged just before apex (Fig. 218)..... 64
- 63¹. Style about uniform in width near apex or tapered to apex, not enlarged just before apex (Fig. 211)..... 66
- 64 (63). Style enlarged on apical half, but apex narrow and blunt; aedeagus with two long processes arising near base and extending to apex of shaft (Fig. 218)
narda n. sp. p-164
- 64¹. Style with enlargement of ventral margin near apex; aedeagal spines short, arising subapically (Figs. 248, 328)..... 65
- 65 (64¹). Style enlargement forming heel for an inverted apical foot; aedeagal subapical spines arising ventrally (Fig. 248)..... *astra* n. sp. p-167
- 65¹. Style enlargement at apex just before pointed tip; aedeagus with a pair of subapical spines, divergent, longer than apex (Fig. 328)..... *serosa* n. sp. p-177
- 66 (63¹). Aedeagus with two long processes arising ventrally near base or middle of shaft and extending apically to near apex of shaft (Figs. 211, 291)..... 67
- 66¹. Aedeagus terminating in processes or with small, narrow, subapical spines or processes (Figs. 231, 226, 346)..... 68
- 67 (66). Aedeagus with broad, blade-like processes arising near middle of shaft and extending almost to apex; style without spine near apex (Fig. 211)
jaculum n. sp. p-164
- 67¹. Aedeagus processes slender, arising near base and extending to tip of shaft; style with a spine on ventral margin near apex (Fig. 291)..... *setosa* n. sp. p-172
- 68 (66¹). Aedeagus shaft terminating in a pair of divergent, long, apical spines (Fig. 231)
ingula n. sp. p-165
- 68¹. Aedeagus with spines arising subapically (Figs. 226, 346)..... 69
- 69 (68¹). Aedeagal spines extending to, or beyond apex (Figs. 241, 316, 226, 346)..... 70
- 69¹. Aedeagal spines minute, subapical, not extending to apex of shaft (Figs. 251, 341)..... 73
- 70 (69). Style with teeth or spines just before apex on ventro-apical margin (Figs. 243, 318)..... 71
- 70¹. Style without teeth or spines near apex (Figs. 228, 348)..... 72
- 71 (70). Aedeagus with two rather long slender lateral processes curving laterally (Fig. 241)..... *lira* n. sp. p-167
- 71¹. Aedeagus lateral processes shorter, straight, slender, extending apically beyond apex of shaft (Fig. 316)..... *callida* n. sp. p-176
- 72 (70¹). Aedeagus spines minute, bristle-like, arising near apex of shaft; style bent near apex, not tapered; tip blunt (Fig. 226)..... *curra* n. sp. p-165
- 72¹. Aedeagus processes long, straight, extending to apex, rather broad at base, tapered to pointed apices; style narrowed to apex, sharp pointed (Fig. 346)
setigera n. sp. p-179
- 73 (69¹). Aedeagal spines arising subapically on lateral margin; style with teeth or spines at apex on ventral margin (Fig. 251)..... *marita* n. sp. p-168
- 73¹. Aedeagal spines arising subapically on ventral margin; style with single spine on ventral margin just before apex, then narrowed to pointed tip (Fig. 341)
conspicua n. sp. p-179

KEY TO KNOWN FEMALES OF *CLINONARIA*

1. Seventh sternum with posterior margin broadly roundedly excavated, without notches, depressions, or produced portions at middle of excavation (Fig. 359)
decorata (Fowler) p-154
- 1¹. Seventh sternum with excavated portion of posterior margin notched, and further excavated or produced..... 2
- 2 (1¹). Seventh sternum excavation with produced lobes or blunt teeth which may be notched at middle (Figs. 356, 358, 360, 361, 363, 364, 365, 366)..... 3
- 2¹. Seventh sternum excavation with smaller excavations or depressions at middle (Figs. 357, 362, 367, 368)..... 7
- 3 (2). Produced portion of excavation with a V-shaped notch at middle separating lobe-like produced pieces (Figs. 356, 358, 360, 363, 365)..... 4
- 3¹. Produced portion of excavation with a broader U-shaped excavation separating produced teeth (Figs. 364, 366)..... either *marita* n. sp. or *serosa* n. sp. p-168, 177
- 4 (3). Seventh sternum excavation broadly sloping or V-shaped (Figs. 356, 358, 360, 363)..... 5
- 4¹. Seventh sternum excavation more roundedly, abruptly excavated, and U-shaped (Figs. 361, 365)..... either *sarana* (Osborn), or *vulgata* n. sp. p-157, 174
- 5 (4). Seventh sternum with lateral angles only slightly produced (Figs. 356, 360)
either *crinalana* n. sp. or *sundara* n. sp. p-138, 157
- 5¹. Seventh sternum with lateral angles more strongly produced (Figs. 358, 363)..... 6
- 6 (5¹). Seventh sternum excavation with a distinct V-shaped notch at middle (Fig. 36)
narda n. sp. p-164
- 6¹. Seventh sternum excavation with a very weak V-shaped notch (Fig. 358)
excerta n. sp. p-152
- 7 (2¹). Seventh sternum excavation about one third the width of segment, almost half distance to base, and broadly V-shaped at base (Fig. 362)..... *cirra* n. sp. p-158

- 7¹. Seventh sternum excavation much broader, more U-shaped (Figs. 357, 367, 368)..... 8
 8 (7¹). Seventh sternum without produced lateral angles, excavation with a small shallow excavation at its center (Fig. 368)..... *alboguttata* (Spangberg) p-182
 8¹. Seventh sternum with produced lateral angles..... 9
 9 (8¹). Seventh sternum excavation shallow with a small rounded excavation at center (Fig. 357)..... *picea* (Walker) p-181
 9¹. Seventh sternum excavation deeper, with central small excavation deeper (Fig. 367)..... *grossa* (Osborn) p-182

DESCRIPTION OF SPECIES OF *Clinonaria*

Clinonaria bicolorata (Osborn)

(figs. 1-5)

Ponana bicolorata Osborn, 1938, p. 43

Clinonaria bicolor Metcalf, 1949, p. 277 (New Synonym)

Length.—Male 11.5 mm.

Structure.—Crown broadly rounded, three times as broad between eyes at base as median length.

Coloration.—Crown and pronotum yellow, tinted with orange. Scutellum pale brown, paler on apical half. Forewings brown.

Male genitalia.—Plates three times as long as wide, apices narrowed and rounded. Styles stout, straight, curved dorsally on apical third, narrowed and sharp pointed at apices. Each style bears a stout spine on dorsal surface about one-fourth the distance from apex, which is parallel with style, and directed basally. Aedeagus with shaft narrowed at about half its length, then slightly broadened near apex and again narrowed to form a narrow apex, which bears a pair of short, thick spines on dorsal margin, each of which is broad and contiguous at base, and directed laterally and caudally. Inner portion of shaft with a thin apical process on ventral side of apex.

Types.—Holotype male from Upper Rocana, N. Para, Brazil, in the Carnegie Museum collection.

Notes.—Osborn described this species in 1938 from four male specimens. The three paratype specimens from Peru are not *C. bicolorata*, but are a new species and are included under the name *selana*. Metcalf again described *bicolorata* under the name *bicolor* when he erected the genus *Clinonaria* in 1949. His two specimens were from British Guiana and are in the North Carolina State University collection. Another male specimen is known from British Guiana and is in the British Museum collection. These four male specimens are all that is known at this time.

Clinonaria phalos n. sp.

(figs. 6-10)

Length.—Male 12.5 mm.

Structure.—Crown broadly rounded, almost transverse, three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum yellow; eyes dark, ocelli red; pronotum with a narrow, dark-brown border on posterior margin. Scutellum and forewings brown; apical half of scutellum and claval area of forewings paler.

Male genitalia.—Plates elongate, tapered to narrow, rounded apices. Styles long, narrow, slightly broadened on apical third, then narrowed to slender, pointed apices. Aedeagus in ventral view shaped like an elongated hourglass. In lateral view, aedeagus is broad, concavely sloping to the ventral margin, forming a pointed apex on the ventrally produced tip, which bears a short, soft, ventrally curved process.

Types.—Holotype male: N. E. Peru, S. A., VIII-18-35, F. Waytkowski, A. C. Miller Collection, Ohio State University. Paratypes: 2 males, Upper Rio Huallaga Peru IX-15-24, F. 6121 H. Bassler Collection, Acc. 33591; 1 male, Rio Santiago, Peru, VIII-13-30, F-6139, H. Bassler Collection, Acc. 33591. Holotype in The Ohio State University Collection. Paratypes in the U. S. National Museum and the DeLong Collections.

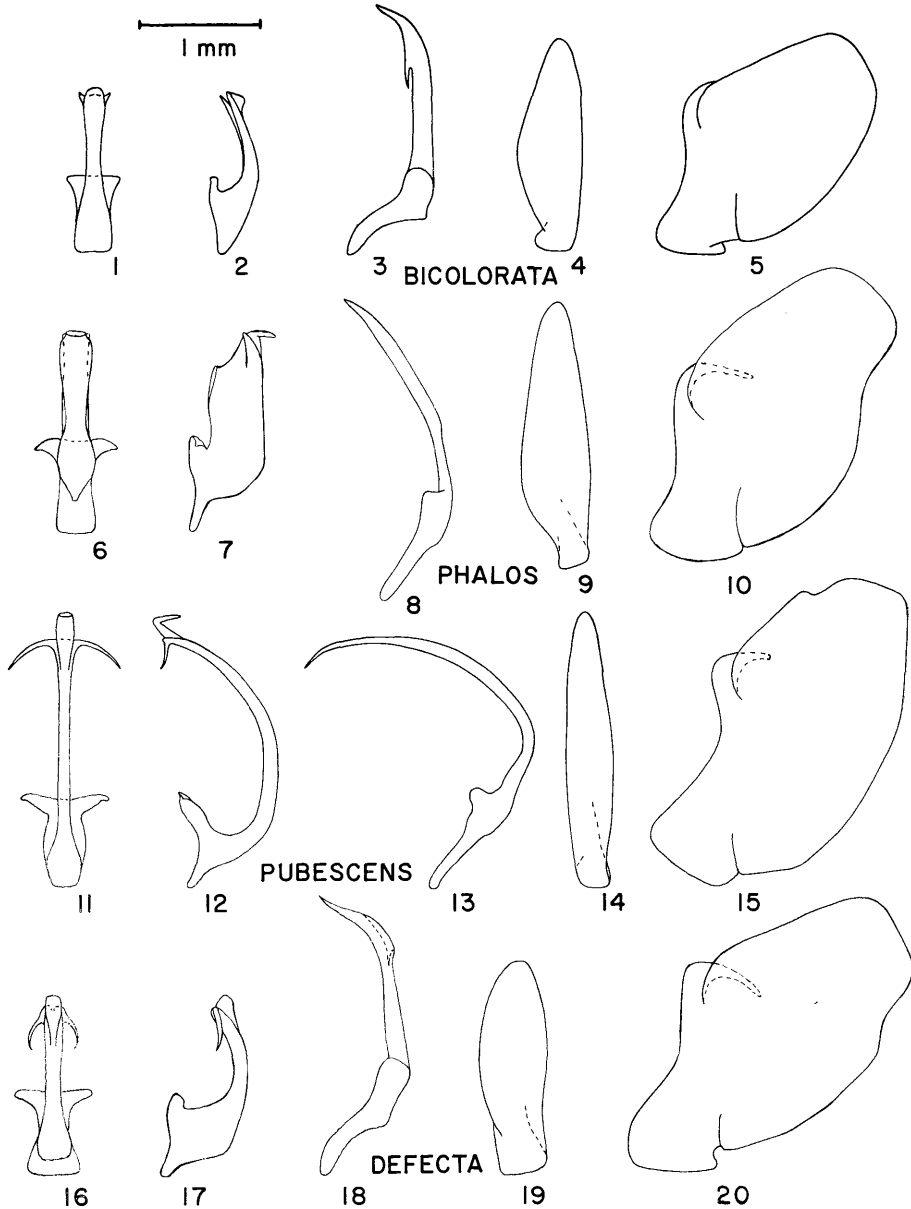


FIGURE 1-5. *Clinonaria bicolorata*
 FIGURE 1. Ventral view of aedeagus
 FIGURE 2. Lateral view of aedeagus
 FIGURE 3. Lateroventral view of style
 FIGURE 4. Ventral view of plate
 FIGURE 5. Lateral view of pygofer
 FIGURE 6-10. *Clinonaria phalos*
 FIGURE 6. Ventral view of aedeagus
 FIGURE 7. Lateral view of aedeagus
 FIGURE 8. Lateroventral view of style
 FIGURE 9. Ventral view of plate
 FIGURE 10. Lateral view of pygofer

FIGURE 11-15. *Clinonaria pubescens*
 FIGURE 11. Ventral view of aedeagus
 FIGURE 12. Lateral view of aedeagus
 FIGURE 13. Lateroventral view of style
 FIGURE 14. Ventral view of plate
 FIGURE 15. Lateral view of pygofer
 FIGURE 16-20. *Clinonaria defecta*
 FIGURE 16. Ventral view of aedeagus
 FIGURE 17. Lateral view of aedeagus
 FIGURE 18. Lateroventral view of style
 FIGURE 19. Ventral view of plate
 FIGURE 20. Lateral view of pygofer

All drawn to the same scale.

***Clinonaria pubescens* n. sp.**

(figs. 11-15)

Length.—Male 13 mm.*Structure.*—Crown broadly rounded, about three times as wide between eyes at base as median length.*Coloration.*—Crown and pronotum dull yellow; eyes dark, ocelli red; pronotum with a rather wide, transverse band of brown pigment on posterior margin. Scutellum and forewings brown with darker brown spotting on forewings.*Male genitalia.*—Plates narrow, elongate, heavily clothed with long, coarse hairs. Styles long, heavy, cylindrical, tapered to pointed apices. Aedeagus long, and narrow to apical fourth, where it is flattened and gradually broadened, in ventral view, to a pair of heavy spines, curved laterally and sharp pointed, just before the narrow apical median process.*Types.*—Holotype male: Achinamiza Peru, VIII-20-27, F-6001 H. Bassler Collection Acc. 33591. Paratypes: 1 male same as holotype; 1 male Pucallpa & Aguaytia Tingo Maria, Peru, IX 5-6-44, E. J. Hambleton; 3 males I. garape Belem, Brazil, Rio Solimoes AM IV-7-30 1966, Malkin, Colr. Holotype and paratype in the American Museum of Natural History Collection. Paratypes in the U. S. National Museum, the Department de Zoologia da Secretaria da Agricultura collection, Sao Paulo, Brazil, and the DeLong Collection.***Clinonaria defecta* n. sp.**

(figs. 16-20)

Length.—Male 13.5 mm.*Structure.*—Crown broadly rounded, more than three times as wide between eyes at base as median length.*Coloration.*—Crown and pronotum orange yellow; eyes dark, ocelli red; posterior margin of pronotum narrowly margined with brown. Scutellum and forewings brown; veins reddish brown, prominent.*Male genitalia.*—Plates three times as long as broad; apices rounded. Styles stout, broadened at more than half their length, bent outwardly, and then caudally, and tapered to pointed apices. Aedeagus in ventral view enlarged at base, then narrowed to near apex, where it is slightly enlarged and bears a pair of spines which are broad at base, narrowed abruptly near shaft, curved toward base of shaft, and tapered to pointed apices. Apical portion of aedeagus is narrowed and extends a short distance beyond bases of spines.*Types.*—Holotype male: Peru, S.A., F. Waytkowski Coll. in Herbert Osborn Collection. Paratypes: 3 males, Rio Urubamba, Peru, III-9-29, F-6143, H. Bassler Collection; 2 males, Archinamiza Peru IX-20-27, F-6001, H. Bassler Coll. Acc. 33591; 1 male, Huanuco, Peru, Feb. 8, 1954, F. L. Waytkowski, Huallanga R. valley, tropical jungle 500 m.a.s.l. Holotype in the Osborn Collection, The Ohio State University. Paratypes in U. S. National Museum, California Academy of Science, and the DeLong Collections.***Clinonaria crinatana* n. sp.**

(figs. 21-25, 356)

Length.—Male 11.5 mm. Female 14 mm.*Structure.*—Crown broadly rounded, about three times as wide between eyes at base as median length.*Coloration.*—Crown and pronotum yellow; eyes dark, ocelli red; very narrow fringe of brown on posterior margin of pronotum. Scutellum and forewings brown, with darker brown flecks and with conspicuous reddish-brown veins.*Male genitalia.*—Plates long and narrowed, tapered to blunt apices, and heavily clothed with long hairs. Styles long, slender, bent, and tapered to narrow, pointed apices. Aedeagus with lateral spines on the basal, dorsally produced portion. Shaft bent near base, stout, slightly enlarged at apex, rounded on outer and apical margins, and bearing a pair of short, delicate spines on dorsal margin just before apex, which curves laterally and dorsally.*Female genitalia.*—Seventh sternum with lateral angles produced and rounded, between which the posterior margin is concavely excavated either side of a broad, median tooth, which is one-fourth the width of segment, is notched at middle, and is not as long as the lateral angles.

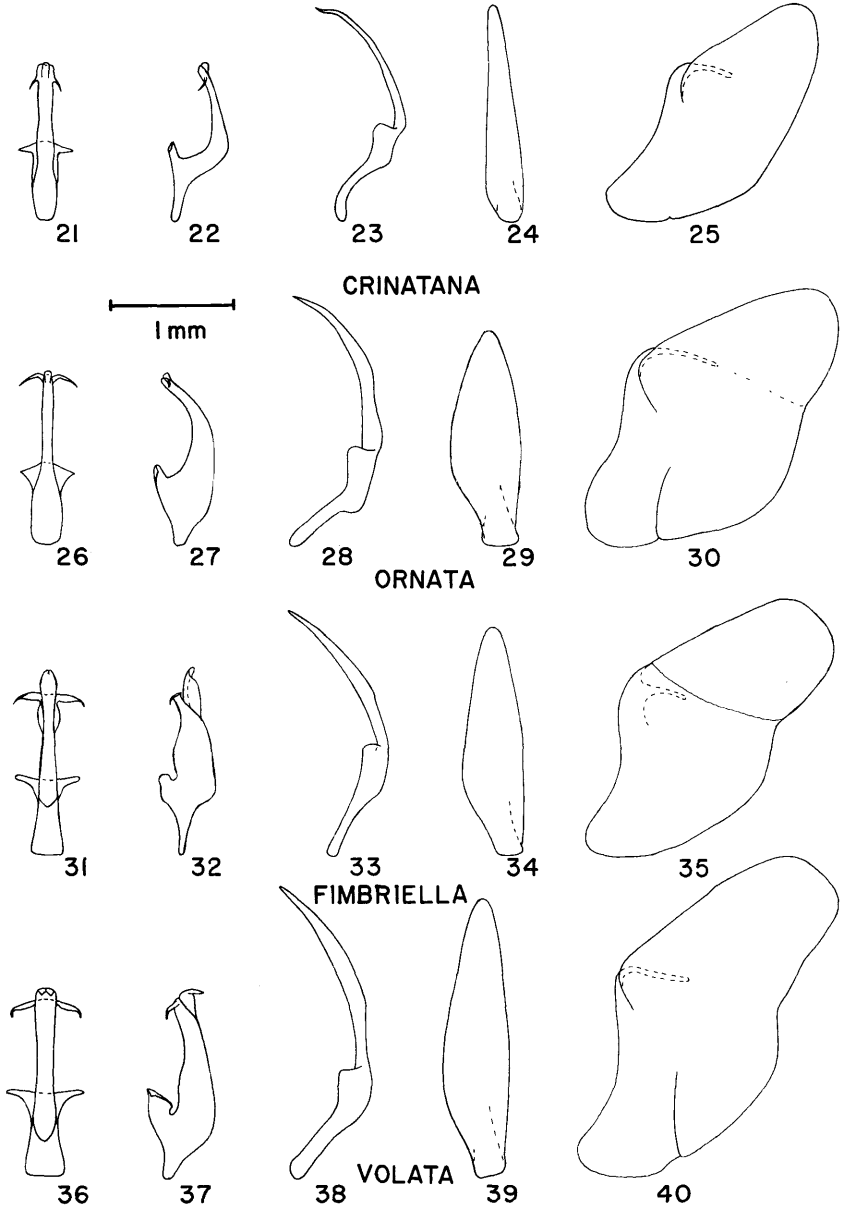


FIGURE 21-25. *Clinonaria crinatana*
 FIGURE 21. Ventral view of aedeagus
 FIGURE 22. Lateral view of aedeagus
 FIGURE 23. Lateroventral view of style
 FIGURE 24. Ventral view of plate
 FIGURE 25. Lateral view of pygofer
 FIGURE 26-30. *Clinonaria ornata*
 FIGURE 26. Ventral view of aedeagus
 FIGURE 27. Lateral view of aedeagus
 FIGURE 28. Lateroventral view of style
 FIGURE 29. Ventral view of plate
 FIGURE 30. Lateral view of pygofer

FIGURE 31-35. *Clinonaria fimbriella*
 FIGURE 31. Ventral view of aedeagus
 FIGURE 32. Lateral view of aedeagus
 FIGURE 33. Lateroventral view of style
 FIGURE 34. Ventral view of plate
 FIGURE 35. Lateral view of pygofer
 FIGURES 36-40. *Clinonaria volata*
 FIGURE 36. Ventral view of aedeagus
 FIGURE 37. Lateral view of aedeagus
 FIGURE 38. Lateroventral view of style
 FIGURE 39. Ventral view of plate
 FIGURE 40. Lateral view of pygofer

All drawn to the same scale.

Types.—Holotype male: Darien Prov., Santa Fe, Panama, VI-2-67, DeLong and Triplehorn. Allotype female: Panama, Barro Colorado, Isl., 18-28, IV, 64, W. D. and S. S. Duckworth. Paratypes: 1 male and 2 females, same as holotype; 1 male, Barro Colo. Is., C. Z., Jan.-Mar. 44, Zetek 5122; 1 male, Tingo Maria, Peru, 9-13-56, 14453, U. S. N. Mus., 212493, Gregoire 1523; 1 male, Trinidad Rio, Pan., 20-3-12, A. Busck Coll.; 1 male, Panama, Pedrogal, 24-IX-52, Coll. E. S. Blanton; 5 females, Barro Colo. Is., X-XI-1941, V-1941, V-24-40, VII-1941, Jas. Jetek; 2 females, Barro Colo. Is., C. Z., 6-21-1937, S. W. Frost Coll; 1 female, Cabima, Pana., May 20, 1911, August Busck; 1 male, Costa Rica, Golfo, Dulce Jimencz, 30-III-14-IV, Reimoser. Holotype and paratypes in the DeLong Collection. Allotype and paratypes in the U. S. National Museum Collection.

Clinonaria ornata (Osborn)

(figs. 26-30)

Ponana ornata Osborn, 1938, p. 44.

Length.—Male 15 mm.

Structure.—Crown broadly rounded, more than three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum yellow; posterior margin of pronotum narrowly margined with dark brown. Scutellum brown, paler on apical half. Forewings pale brown with darker brown mottling.

Male Genitalia.—Plates three times as long as broad, apices narrowed, rounded. Styles elongate, slender, slightly broadened at two-thirds their length, then bent and tapered to pointed apices. Aedeagal basal process with terminal spines which extend laterally. Shaft broadened at middle (in lateral view), then gradually tapered to apex, which bears two prominent spines on dorsal margin. Inner portion of shaft protrudes on ventral side and bears a thin apical process.

Type.—Holotype male from Peru, in the Carnegie Museum Collection.

Notes.—This species is known only from Peru. Besides the holotype, ten other males were seen—the paratype male and nine males in the California Academy of Science Collection.

Clinonaria fimbriella n. sp.

(figs. 31-35)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, almost parallel margined, about three times as broad between the eyes at base as median length.

Coloration.—Crown and pronotum yellow; eyes black, ocelli red; posterior margin of pronotum bordered with brown. Scutellum and forewings brown, veins darker.

Male genitalia.—Plates three and one-half times as long as broad, tapered to half their width, with rounded apices, clothed with long, fine pubescence. Styles rather stout, bent obliquely at half their length, slightly enlarged at two-thirds their length, then tapered to pointed apices. Aedeagus with basal process bearing a pair of laterally produced spines. Shaft in lateral view broadened near base, narrowed at two-thirds its length to form a dorsal sheath-like portion, bearing a pair of prominent, broad spine-like lateral processes, which taper to pointed apices. Inner portion of shaft is ventral and extends through sheath, and is broadened, then narrowed, to form a bluntly pointed apex.

Types.—Holotype male: Hacienda Maria, Cusca, Peru, March 2, 1952, F. L. Waytkowski. Paratypes: 1 male, same as holotype; 2 males, Achinamiza, Peru, 8-20-27, F. 6001, H. Bassler Collection, Acc. 33591; 1 male, Ixiamas, Bolivia, Dec., W. M. Mann, Mulford Bio. Expl. 1921-22. Holotype in the North Carolina State University Collection; paratypes in the American Museum of Natural History, the U. S. National Museum, and the DeLong Collections.

Clinonaria volata n. sp.

(figs. 36-40)

Length.—Male 14 mm.

Structure.—Crown broadly curved on front margin, about two and one-half times as broad between eyes at base as median length.

Coloration.—Crown and pronotum yellow; eyes dark, ocelli red; posterior margin of pronotum bordered with brown. Scutellum and forewings brown, with darker raised spots of brown on discs of wings.

Male genitalia.—Plates three and one-half times as long as broad, tapered on apical half to narrow rounded apices. Outer margins clothed with fringe of long, fine pubescence. Styles long, slender, bent outwardly at half their length, slightly enlarged, then tapered to pointed apices. Aedeagal basal process forming a pair of lateral spines at its apex. Aedeagal shaft bent, close to base; in lateral view, broadened on basal half, narrowed on apical half, bearing a pair of broadened, leaf-like processes on dorsal margin at apex. A bifid process is produced at apex on ventral margin.

Types.—Holotype male: Sinchono Peru, J. G. Sanders. Paratypes: 7 males, same as holotype; 1 male, Rio Santiago, Peru, 8-28-24, F-6139, H. Bassler Coll. Acc. 33591. Holotype and paratypes in the DeLong Collection. Paratype in the American Museum of Natural History Collection.

***Clinonaria bivola* n. sp.**

(figs. 41-45)

Length.—Male 14 mm.

Structure.—Crown broadly, roundedly produced, about three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum orange yellow; eyes darker, ocelli red; pronotum with a brown border on posterior margin. Scutellum and forewings brown; veins of wings reddish brown.

Male genitalia.—Plates more than three times as long as wide, with narrowed, rounded apices. Outer margins clothed with fringe of long, fine pubescence. Styles long, slender, broadened slightly on apical third, then narrowed and pointed. Aedeagal basal process with lateral spines arising at apex. In lateral view, aedeagus bent and thickened near base with a convexly curved bulge on ventral margin. Aedeagus narrowed at middle, with tip bent slightly dorsally, and bearing a pair of slender processes which curve laterally and dorsally. The thin apical process arises on ventral margin, is broadened, then tapered to a bluntly pointed apex.

Types.—Holotype male: Chauchamayo, Peru, W. F. H. Rosenberg. Paratypes: 2 males, same as holotype; 1 male, Tingo Maria, Huan., Peru, October 14, 1946, Alt. 2200 ft., J. C. Pallister Coll. Donor, Frank Johnson. Holotype and paratype in the U. S. National Museum Collection. Paratypes in the American Museum of Natural History and the DeLong Collections.

***Clinonaria selana* n. sp.**

(figs. 46-50)

Length.—Male 13.5 mm.

Structure.—Crown broad, slightly produced, and rounded, almost three times as broad between eyes as median length.

Coloration.—Crown and pronotum orange yellow; eyes dark brown, ocelli red; posterior margin of pronotum bordered with brown. Scutellum and forewings brown, veins reddish brown.

Male genitalia.—Plates four times as long as wide; apices narrow, rounded, outer margins clothed with fringe of long, fine pubescence. Styles long, stout, broadened slightly on apical half, then tapered and pointed at apices. Aedeagal basal process with a pair of terminal spines. Shaft short, broadened on basal two-thirds, apical third narrowed, and bearing a pair of broad, flat, spine-like processes on dorsal margin at apex, which extend laterally, the tips deflected basally. Inner portion of shaft protrudes from sheath on ventral side and forms an apical process, which is leaf-like, with a blunt tip.

Types.—Holotype male: Achinamiza, Peru, 8-27-27, F. 6001, H. Bassler Collection, Acc. 33591. Paratypes: 2 males, same as holotype; 2 males, Upper Rio Maranon, Peru, Feb. 22, 1954, F. L. Waytkowski, Haullanga R. Valley, tropical jungle 500 m.a.s.l.; 1 male, Palcazu E., Peru, 235 from W. F. H. Rosenberg; 1 male, Tingo Maria, Peru, X-46, W. K. Weyrauch, 670 m.

830; 1 male, Tingo Maria, Peru, II-1950, H. A. Allard; 1 male, Peru: Yurac, 67 mi. E. of Tingo Maria, XI-16-1954, E. I. Schlinger and E. S. Ross Collectors; 1 male, Peru. Holotype in the American Museum of Natural History Collection. Paratypes in the American Museum of Natural History, the U. S. National Museum, the North Carolina State University, the California Academy of Science, and the DeLong Collections.

***Clinonaria fida* n. sp.**

(figs. 51-55)

Length.—Male 12 mm.

Structure.—Crown broadly rounded, three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum dull yellow; anterior portion of pronotum, especially the area behind each eye, and the posterior margin, darker. Scutellum brown, the posterior half paler. Forewings brown, mottled with darker brown.

Male genitalia.—Plates about three times as long as broad, rounded at apices. Styles with long, slender blades which are pointed at apices. Aedeagus narrow near base, broadening gradually for about three-fourths its length, then rapidly narrowing to form a slender apex, which bears a pair of spines arising laterally on broadened base just before tip. The spines are about one-sixth the length of shaft and curve laterally, then bend dorsally and cephalad. Pygofer with blunt apices.

Type.—Holotype male: British Guiana, Amazon-Courantyne divide, head of Oronoque River, 1937, in the British Museum of Natural History.

***Clinonaria exerata* n. sp.**

(figs. 56-60)

Length.—Male 11.5 mm.

Structure.—Crown broadly rounded, about two and one-half times as broad between eyes at base as median length.

Coloration.—Crown pale brown. Pronotum sordid yellow with a little darker mottling; posterior margin bordered with dark brown. Scutellum dark brown. Forewings pale brown, mottled with darker brown.

Male genitalia.—Plates about three times as long as broad; apices bluntly rounded. Styles slender, apices pointed. Aedeagal shaft almost uniform in width, slightly broadened on apical half; broadened just before apex, which bears a pair of spines which arise laterally and extend laterally, then curve cephalad near apex. Pygofer with a notch on dorso-caudal margin and a dorso-cephalad finger-like process.

Type.—Holotype male: British Guiana-Upper Courantyne R., Sept. 1935, G. A. Hudson, B. M. 1936-360. Holotype in the British Museum of Natural History.

***Clinonaria bipunctata* (Walker)**

(figs. 61-65)

Darma bipunctata Walker, 1858, p. 103

Length.—Male 15 mm.

Structure.—Crown short and broad, scarcely produced, more than three times as wide between eyes as median length. Pronotum much broader than head. Head rounded to front. Ocelli widely separated, much closer to eyes than to median line.

Coloration.—Brown, shining, varied with dark red. Forewings piceous with a black discal dot; apical border blackish with the exception of a pale marginal streak.

Male genitalia.—Plates more than five times as long as wide, with a narrowed but rounded apex. Style in lateral view strongly curved from base to tip, varying in width, with the apical fifth tapered to a blunt apex. Aedeagus in lateral view strongly curved, with a rather broad shaft; in ventral view, two short-pointed, divergently directed spines arise from the narrowed blunt apex. Pygofer bears a long slender process, which arises at about the middle of the dorsal margin, extends ventrally almost across and beneath the pygofer, and is narrowed and curved on the apical half.

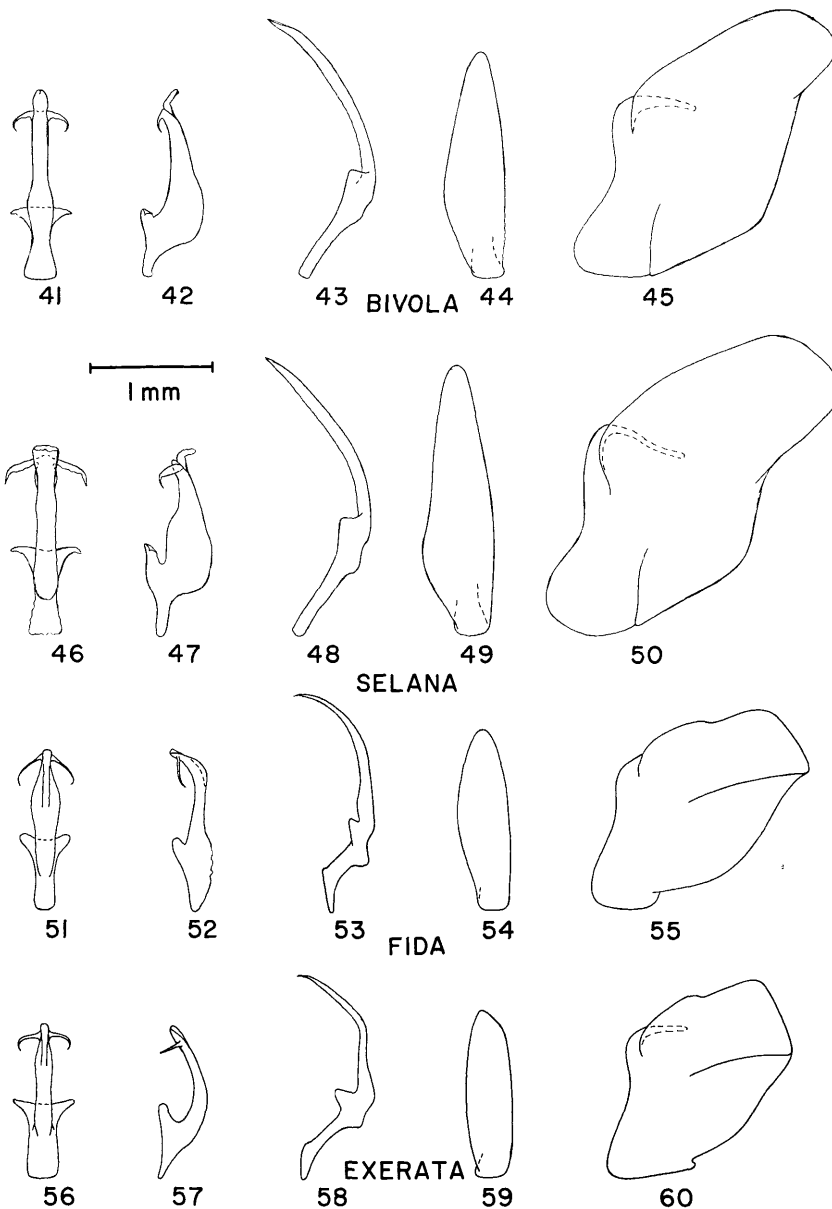


FIGURE 41-45. *Clinonaria bivola*
 FIGURE 41. Ventral view of aedeagus
 FIGURE 42. Lateral view of aedeagus
 FIGURE 43. Lateroventral view of style
 FIGURE 44. Ventral view of plate
 FIGURE 45. Lateral view of pygofer
 FIGURE 46-50. *Clinonaria selana*
 FIGURE 46. Ventral view of aedeagus
 FIGURE 47. Lateral view of aedeagus
 FIGURE 48. Lateroventral view of style
 FIGURE 49. Ventral view of plate
 FIGURE 50. Lateral view of pygofer

FIGURE 51-55. *Clinonaria fida*
 FIGURE 51. Ventral view of aedeagus
 FIGURE 52. Lateral view of aedeagus
 FIGURE 53. Lateroventral view of style
 FIGURE 54. Ventral view of plate
 FIGURE 55. Lateral view of pygofer
 FIGURE 56-60. *Clinonaria exerata*
 FIGURE 56. Ventral view of aedeagus
 FIGURE 57. Lateral view of aedeagus
 FIGURE 58. Lateroventral view of style
 FIGURE 59. Ventral view of plate
 FIGURE 60. Lateral view of pygofer

All drawn to the same scale.

Type.—Holotype male from Panama, in the British Museum of Natural History collection.

Notes.—This species also occurs in Brazil. One male specimen labeled "Rio Jan" is in the DeLong Collection and two male specimens labeled "Brazil" F. Sahlb. are in the Stockholm Collection.

Clinonaria hebes (Fowler)
(figs. 66-70)

Gypona hebes Fowler, 1903, p. 310

Length.—Male 15 mm.

Structure.—Crown short, broadly rounded, parallel-margined, more than twice as wide between eyes as median length. Crown bluntly angled with front. Ocelli large, closer to eyes than to median line. Pronotum sloping behind eyes, distinctly wider than head, with conspicuous humeral angles.

Coloration.—Crown and pronotum pale brown. Pronotum dark brown on disc and posterior portion; few spots and dashes on anterior portion. Scutellum dark brown. Forewings brown, with dark brown spots and areas; some light areas between veins on costal and apical areas.

Male genitalia.—Plates rather long, curved near apices to form blunt tips, almost five times as long as broad. Styles in lateral view elongate, narrowed from middle to form slender blunt apices, which are curved dorso-anteriorly. Aedeagus, in ventral view, more than half as broad as long on the apical portion, with tooth-like protrusion on each side; apex is broad and rounded. In lateral view, lateral portions appear rolled, and apex is broad and rounded, with a portion curved caudo-ventrally. Pygofer is abruptly constricted and bears a long, slender process which is as long as pygofer, arises at about the middle of the caudal margin, and extends dorsally.

Types.—One male and three females from Panama are in the Type series in the British Museum collection. We here designate the male specimen from V. de Chiriqui (Panama), 25-4000 feet, champion as the lectotype of this species.

Notes.—This species is known only from the types and it seems very likely that the females will not be *hebes* and may even represent three separate species. For this reason the female description is not included.

Clinonaria notatula (Osborn)
(figs. 71-75)

Ponana notatula Osborn, 1938, p. 41.

Length.—Male 11 mm.

Structure.—Crown broadly rounded, more than three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum pale brown, with numerous small punctate reddish-brown flecks and a few small brown spots. Forewings pale brown, with dark veins and small lines or spots of pigment between the veins, and a brown spot at end of each claval vein along commissure.

Male genitalia.—Plates elongate, narrow, about one and one-half times as long as combined basal width. Styles long and very slender, with pointed apices, curving to the length of aedeagus. Dorsal portion of aedeagus short and broad, with apex a blunt, laterally extended process. In ventral view, shaft is narrow, gradually broadening on apical half to a truncated apex with lateral rounded extensions; median tip of shaft protrudes at apex. In lateral view, aedeagus is broad at base, narrowed on median third, then broadened on apical third. Pygofer simple.

Type.—Holotype male from Bolivia, in the Carnegie Museum Collection.

Notes.—This species is known only from the holotype.

Clinonaria sulfurea (Osborn)
(figs. 76-80)

Ponana sulfurea Osborn, 1938, p. 43

Length.—Male 14 mm.

Structure.—Crown broad, scarcely produced, three times as broad at base as median length.

Coloration.—Crown and a band across anterior margin of pronotum pale brown. A broad transverse band across middle of pronotum yellow. Posterior margin of pronotum, scutellum, and forewings dark brown.

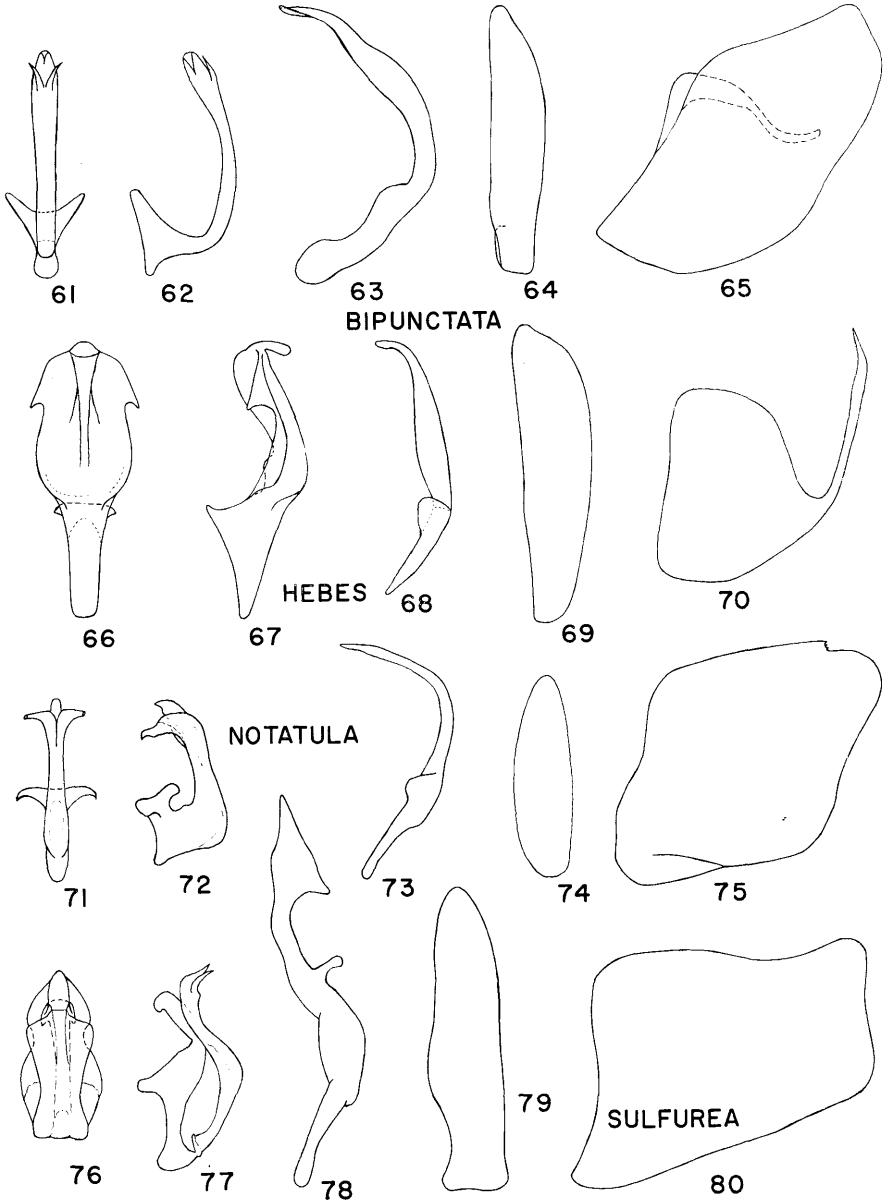


FIGURE 61-65. *Clinonaria bipunctata*
 FIGURE 61. Ventral view of aedeagus
 FIGURE 62. Lateral view of aedeagus
 FIGURE 63. Lateroventral view of style
 FIGURE 64. Ventral view of plate
 FIGURE 65. Lateral view of pygofer
 FIGURE 66-70. *Clinonaria hebes*
 FIGURE 66. Ventral view of aedeagus
 FIGURE 67. Lateral view of aedeagus
 FIGURE 68. Lateroventral view of style
 FIGURE 69. Ventral view of plate
 FIGURE 70. Lateral view of pygofer

FIGURE 71-75. *Clinonaria notatula*
 FIGURE 71. Ventral view of aedeagus
 FIGURE 72. Lateral view of aedeagus
 FIGURE 73. Lateroventral view of style
 FIGURE 74. Ventral view of plate
 FIGURE 75. Lateral view of pygofer
 FIGURE 76-80. *Clinonaria sulfurea*
 FIGURE 76. Ventral view of aedeagus
 FIGURE 77. Lateral view of aedeagus
 FIGURE 78. Lateroventral view of style
 FIGURE 79. Ventral view of plate
 FIGURE 80. Lateral view of pygofer

Not drawn to the same scale.

Male genitalia.—Plates elongate, slender, one and one-half times as long as combined width at base; apices bluntly angled. Styles abruptly narrowed on ventral margin at one-third their length, central third slender, then abruptly expanded in apical third, which curves on dorsal margin to form sharp pointed apices with long truncate ventral margin. Aedeagus in ventral view appearing short and broad, with median ventral portion excavated and a median portion of shaft protruding at apex. In lateral view, ventral portion is narrow, with caudally directed, pointed apices. Dorsal portion is enlarged on basal half, then narrowed to form a slender apical portion, which is bent cephalad. Pygofer simple, without inner spines.

Type.—Holotype males from Brazil, in the Carnegie Museum collection.

Notes.—Known only from the type and a paratype male from the same locality.

***Clinonaria supina* n. sp.**

(figs. 81–85)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, more than three times as broad between eyes at base as median length.

Coloration.—Crown yellow with eyes black, ocelli red, and margin a little darker. Pronotum brown, with a broad marginal yellow band extending from the humeral angles across anterior margin, forming a semi-circular band of paler color on lateral and anterior margins. Scutellum brown, apical portion paler. Forewings brown.

Male genitalia.—Plates rather broad, three times as long as wide, convexly curved on inner margins to form blunt tips on outer margin. Styles thickened at base and strongly curved; style blades long, slender, tapered to blunt apices. Aedeagus with a basal process which is broadened at apex. Shaft broad, in ventral view, bearing two pairs of prominent spines; apical pair straight, longer, and extending laterally and slightly basally; subapical pair shorter, curved basally, then inwardly almost to shaft, tapered and sharp-pointed. Pygofer with a finger-like process at dorsal portion on each side of anal tube. A long, slender spine arises each side near base of this process on inner wall and extends ventrally and caudally more than half the length of pygofer; a long, slender, tapering and pointed spine arises each side on the caudal margin and is directed dorsally about half the length of the pygofer.

Types.—Holotype male: Tingo Maria, Huan., Peru, October 18, 1946, Alt. 2200 ft., J. C. Pallister Coll., Donor Frank Johnson. Paratypes: 1 male, same data as holotype; 1 male, Middle Rio Ucayali, Peru, VI-6-26, F-6116, H. Bassler Collection, Acc. 33591; 1 male, Tingo Maria, Peru, XI 1949, H. A. Allard; 1 male, Peru: Yurac, 67 mi. E. of Tingo Maria, XI-16-1954, E. I. Schlinger & E. S. Ross Collectors; 1 male, Huanuco, Peru, Feb. 23, 1954, F. L. Waytowski, Huallanga R. valley, tropical jungle, 500 m.a.s.l.; 1 male, Peru, Tingo Maria, 13-VIII-60, O. Vargas. Holotype and paratypes in the American Museum of Natural History. Paratypes also in the U. S. National Museum, the California Academy of Science, the North Carolina State University, and the DeLong Collections.

***Clinonaria trispina* n. sp.**

(figs. 86–90)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, about three times as broad between eyes at base as median length.

Coloration.—Almost exactly like *supina*. Crown brownish yellow; eyes dark, ocelli red. Pronotum brown with a broad, yellow, marginal band extending from humeral angles forward and across anterior margin, forming a semi-circular pale yellow band on lateral and anterior margins. Scutellum brown, apical portion slightly paler. Forewings brown.

Male genitalia.—Plates broad, about twice as long as wide, inner margins strongly convexly curved to blunt apices on outer margins. Styles thick and strongly bent at base; blades long, stout, tapered to sharp-pointed apices. Aedeagus with a ventral process which is blunt at apex. Shaft, in ventral view, rather broad, with a pair of subapical processes arising on ventral margin, which are more than one-third the length of shaft, extending basally with apices tapered and pointed and turned outward. A pair of apical spines arise on dorsal margin, each of which has

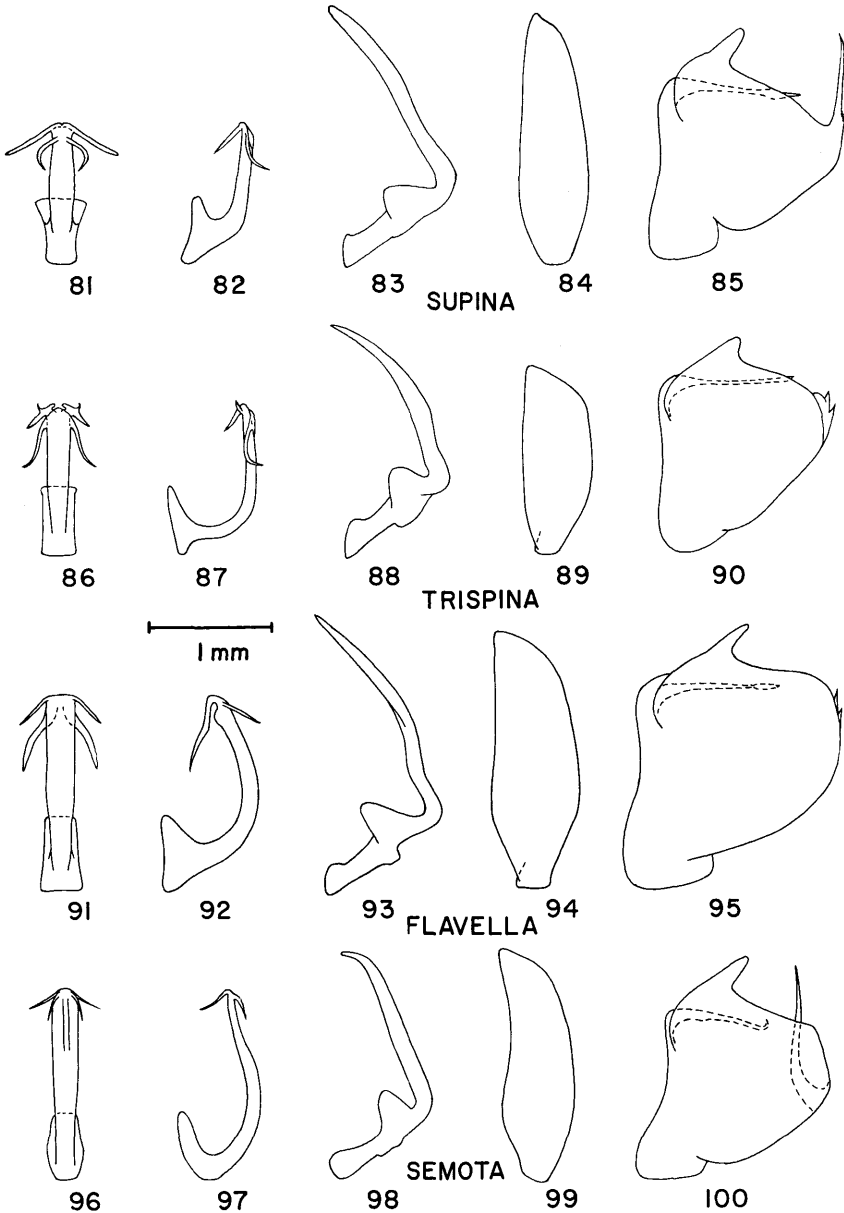


FIGURE 81-85. *Clinonaria supina*
 FIGURE 81. Ventral view of aedeagus
 FIGURE 82. Lateral view of aedeagus
 FIGURE 83. Lateroventral view of style
 FIGURE 84. Ventral view of plate
 FIGURE 85. Lateral view of pygofer
 FIGURE 86-90. *Clinonaria trispina*
 FIGURE 86. Ventral view of aedeagus
 FIGURE 87. Lateral view of aedeagus
 FIGURE 88. Lateroventral view of style
 FIGURE 89. Ventral view of plate
 FIGURE 90. Lateral view of pygofer

FIGURE 91-95. *Clinonaria flavella*
 FIGURE 91. Ventral view of aedeagus
 FIGURE 92. Lateral view of aedeagus
 FIGURE 93. Lateroventral view of style
 FIGURE 94. Ventral view of plate
 FIGURE 95. Lateral view of pygofer
 FIGURE 96-100. *Clinonaria semota*
 FIGURE 96. Ventral view of aedeagus
 FIGURE 97. Lateral view of aedeagus
 FIGURE 98. Lateroventral view of style
 FIGURE 99. Ventral view of plate
 FIGURE 100. Lateral view of pygofer

All drawn to the same scale.

three projecting spurs, a blunt one extending toward apex, a short-pointed spur extending outwardly, and a third sharp-pointed spine extending at right angles to the other two. Pygofer with two spine-like teeth projecting caudally at the ventro-caudal margin. A long, slender spine arises from the dorsal pygofer wall and extends into the genital chamber on each side, each spine with an enlarged spoon-like apex. A short, blunt finger-like process is also present on the dorsal margin on each side of anal tube.

Type.—Holotype male: Peru: Yurac, 67 miles E. of Tingo Maria, XI-16-1954, E. I. Schlinger & E. S. Ross Collectors. Holotype in the California Academy of Science Collection.

***Clinonaria flavella* n. sp.**

(figs. 91-95)

Length.—Male 13 mm.

Structure.—Crown broad, curved, scarcely produced, more than three times as wide between eyes at base as median length.

Coloration.—Crown sordid yellow; eyes black, ocelli red. Pronotum brown, the lateral and anterior portions paler brown, the paler area forming a semi-circular band on the lateral and anterior margins. Scutellum paler brown. Forewings dark brown.

Male genitalia.—Plates about three times as long as wide, strongly convexly curved on inner margins to form blunt apices on outer margin. Styles large at base, strongly bent; blades stout, slightly broader at middle; apex tapered and pointed. Aedeagal shaft rather broad, in ventral view, gradually broadening to apex, which bears two pairs of spines. The pair of spines on the ventral side is subapical, straight, shorter than the apical pair, and tapered to sharp-pointed tips. These extend ventrally and basally. The apical spines arise dorsally, are bent at half their length and are thickened and pointed, and extend dorsally and basally. Pygofer with two short spines on caudo-ventral margin; two long blunt finger-like processes on dorso-caudal margin, one each side of anal tube; and, on each side, a long, slender spine, with a spear-like apex, which arises on inner pygofer wall, dorso-cephalad, on each side, and extends into the genital chamber.

Type.—Holotype male: Rio Ucayali, Peru, 10-13-23, F-6116, H. Bassler Collection Acc. 33591. Holotype in the American Museum of Natural History Collection.

***Clinonaria semota* n. sp.**

(figs. 96-100)

Length.—Male 12.5 mm.

Structure.—Crown broad, curved, almost transverse, more than three times as wide between eyes at base as median length.

Coloration.—Similar to *supina*. Crown yellow with darker area on margin at each side of the middle, and which extends to base on inner margin of each ocellus. Pronotum brown, with a large pale area on lateral margin behind each eye, but not extending to eye. Scutellum brown, paler on apical half. Forewings brown with a paler, subhyaline stripe extending from one-third the length of wing to apex between the outer and inner sectors. A pale longitudinal line extends from apex of crown to apex of scutellum.

Male genitalia.—Plates three times as long as wide, inner margins convexly rounded, forming blunt apices on outer margin. Styles large at base, bent upon themselves to form long blades which taper and are blunt at apices. Aedeagal shaft broadened before middle (in ventral view) and continued to apex, where it bears two pairs of spines. Ventral pair is about one-sixth the length of shaft, and extends ventrally and basally. Dorsal pair is about twice as long and extends dorsally and laterally. Pygofer has a blunt finger-like process arising on the dorso-caudal margin next to and on each side of anal tube. Two pairs of spines arise on the inner pygofer wall; a long, heavy pair arises on the ventral pygofer wall and extends dorsally to anal tube, and a shorter, more slender pair arises on the median dorsal wall and extends inside more than half the width of pygofer.

Types.—Holotype male: Peru: Monson Valley, Tingo Maria, IX-23-1954, E. I. Schlinger & E. S. Ross Collectors. Paratypes: 1 male, same data as holotype except X-27-1954; 1 male, Tingo Maria, Peru, XI, 1949, H. A. Allard. Holotype and one paratype in the California Academy of Science Collection. Other paratype in the U. S. National Museum Collection.

***Clinonaria phaios* n. sp.**

(figs. 101-105)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, three times as wide between eyes at base as median length.

Coloration.—A white median stripe extending from apex of crown to apex of scutellum. Crown yellow with red ocelli and a black, longitudinal stripe between ocelli and the pale median stripe. Pronotum brown, with a large, pale, angular spot on each lateral margin, narrowing and extending diagonally toward but not reaching the anterior margin. Scutellum brown with median white stripe; apical half paler brown. Forewings brown.

Male genitalia.—Plates almost four times as long as wide; inner margins convexly rounded to form blunt apices on the outer margins. Styles large at base, bent upon themselves to form long blades, which curve upward near apex and taper to pointed apices. Aedeagal shaft narrow at base, gradually broadening for half its length, then slightly narrowed near apex, where two pairs of spines arise. One pair is subapical, extends laterally, and is about one-fourth the length of shaft. The other pair arises at the apex as the shaft rapidly narrows, is about equal in length to the first pair, and extends laterally. The pygofer bears a short finger-like process on the dorso-caudal margin which extends along the anal tube. A long, slender process arises from each side of the inner dorsal pygofer wall and extends around the anal tube into the genital chamber. A heavier spine arises on the ventral wall near the ventro-caudal margin and extends dorsally into the genital chamber.

Type.—Holotype male: Pucallpa and Aguaytle, Tingo Maria, Peru, IX-5-6, 44, E. J. Hambleton. Holotype in the U. S. National Museum Collection.

***Clinonaria ultra* n. sp.**

(figs. 106-110)

Length.—Male 12 mm.

Structure.—Crown broadly rounded, more than three times as wide between eyes at base as median length.

Coloration.—Crown yellow with brownish coloration extending from margin of crown to base, between ocelli, and with a median pale brownish stripe. Pronotum yellow with a pale, longitudinal median stripe formed by brown areas on each side of middle of disc and on basal portion. A small area of pale brownish pigment behind each eye and extended narrowly along anterior margin. Scutellum brown, apex pale brown. Forewings brown, apices paler.

Male genitalia.—Plates almost four times as long as wide, inner margins convexly rounded to form blunt apices on the outer margin. Styles large at base, bent upon themselves to form long blades which curve upward near apex and taper to pointed apices. Aedeagal shaft narrowest at base, gradually broadened to apex, which bears three pairs of spines on the broadest portion. One pair is subapical and arises just as the aedeagus slightly but abruptly widens. These spines are slender, sharp-pointed, extend laterally, and are about one-sixth the length of the shaft. Two pairs arise at apex. Those spines arising ventrally are more slender and extend ventrally, while those arising dorsally are stouter, longer, and extend laterally and dorsally. The pygofer bears a short finger-like process on the dorso-caudal margin which extends along the anal tube. A long, slender process arises from each side on the inner dorsal pygofer wall and extends around the anal tube into the genital chamber. A heavier spine arises on the ventral wall each side near the ventro-caudal margin and extends dorsally into the genital chamber. In size and appearance this spine could easily be confused with the style.

Types.—Holotype male: Rurrenabaque Beni, Bolivia, Dec. 1921, Wm. M. Mann, Mulford Biol. Expl. 1921-22. Paratype male: Tumupasa, Bolivia, Dec., W. M. Mann, Mulford Biol. Expl. 1921-1922. Holotype and paratype in the U. S. National Museum Collection.

***Clinonaria zipha* n. sp.**

(figs. 111-115)

Length.—Male 11.5 mm.

Structure.—Crown broadly rounded, three times as wide between eyes at base as median length.

Coloration.—Crown pale brown, unmarked. Pronotum brown, with paler areas on lateral margins. Scutellum brown; a faint pale line extends from anterior margin of crown across pronotum and scutellum. Forewings brown.

Male genitalia.—Plates more than three times as long as broad, inner margins sloping to outer margins to form blunt, rounded apices. Styles large at base, recurved upon themselves to form long blades, which are turned dorsally at tip and pointed. Aedeagal shaft slightly broadened at middle, then broadened even more near apex. Apex bearing three pairs of spines. The two spines arising on the ventral margin are short, slender spurs directed basad; those arising laterally are slightly subapical and are the longest, about one-fourth the length of the shaft. The apical spines arise on the dorsal side, are about two-thirds the length of the lateral spines, and are parallel to them. Pygofer with bluntly pointed finger-like process on dorso-caudal margin. Spine arising on the inner ventral wall is broad and extends to anal tube. Spine arising on inner pygofer wall at dorsal portion is slender, long, spear-headed, and extends under pygofer.

Type.—Holotype male: British Guiana, Amazon-Courantyne divide, head of Oronoque River, 1937, in the British Museum of Natural History.

***Clinonaria xantha* n. sp.**

(figs. 116–120)

Length.—Male 12 mm.

Structure.—Crown roundedly produced, about two and one-half times as wide between eyes at base as median length.

Coloration.—Crown yellow with brown pigmentation between ocelli and a medial pale line which extends from anterior margin of crown across pronotum and scutellum. Pronotum yellow with brown on disc and posterior portion, except for pale median line. A large, brown area behind each eye and extending almost to middle along anterior margin. Scutellum brown, apical portion mostly yellow. Forewings brown.

Male genitalia.—Plates three times as long as broad. Styles large at base, recurved upon themselves, forming long blades which are curved upward at apices and are sharp-pointed. Aedeagal shaft broadened at middle and continuing to apex, which bears three pairs of spines. The subapical pair arises laterally, at the widest portion of the aedeagus. These spines extend laterally, curve caudally at apices, and are about one-third the length of the shaft. Two pairs arise at apex. The pair of spines arising on ventral margin extend diagonally and ventrally, and are less than half as long as the lateral spines. The pair arising on the dorsal margin extend laterally and are about two-thirds as long as the lateral spines. Pygofer with a prominent finger-like process, which is bluntly pointed on dorso-caudal margin, arising on each side just above anal tube. A broad, stout spine arises on ventral pygofer wall and extends into genital chamber beyond end of anal tube. Spine rising on dorsal pygofer wall extends around anal tube and is slender, with curved, tapered, and pointed apex.

Types.—Holotype male: E. do Para, Fordlandia, Rio Tapajas, R. Damareno Coll. 12–1–56. Paratype male: Ceara, Brazil, Dias da Rocha, Lot No. 28–1744. Holotype in the DeLong Collection, paratype in the U. S. National Museum Collection.

***Clinonaria flava* n. sp.**

(figs. 121–125)

Length.—Male 12.5 mm.

Structure.—Crown broadly rounded, more than three times as wide between eyes at base as median length.

Coloration.—Crown yellow; margin and two longitudinal areas between red ocelli and a median pale stripe, brown. Pronotum brownish, with two paler areas, one along each lateral margin, which narrow to pointed apices and are directed diagonally toward but do not reach the anterior margin. Scutellum brown, apical half paler. Forewings brown.

Male genitalia.—Plates about two and one-half times as long as broad, the inner margins convexly rounded, forming blunt, rounded apices on outer margin. Styles large at base, recurved upon themselves, forming long blades, each side, which are turned dorsally and tapered at apices. Aedeagal shaft slightly widened about middle and continuing as wide to apex, where it bears

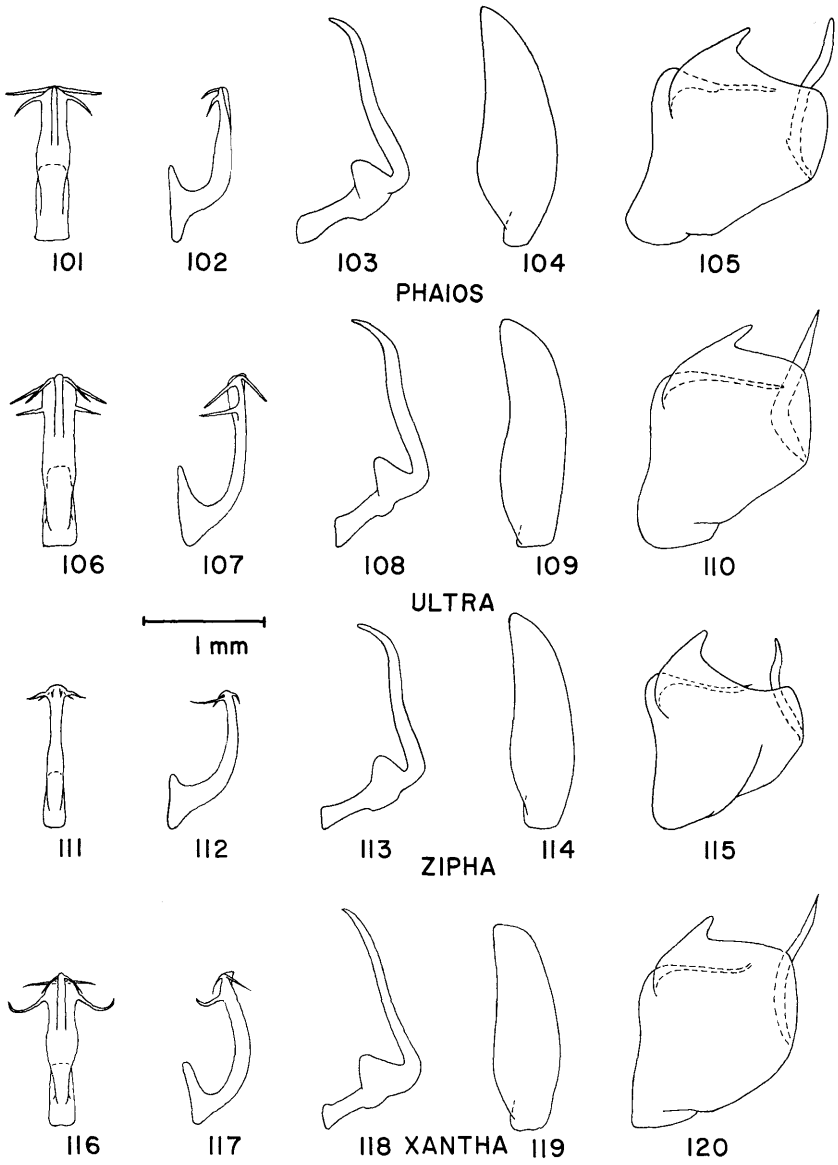


FIGURE 101-105. *Clinonaria phaios*
 FIGURE 101. Ventral view of aedeagus
 FIGURE 102. Lateral view of aedeagus
 FIGURE 103. Lateroventral view of style
 FIGURE 104. Ventral view of plate
 FIGURE 105. Lateral view of pygofer

FIGURE 106-110. *Clinonaria ultra*
 FIGURE 106. Ventral view of aedeagus
 FIGURE 107. Lateral view of aedeagus
 FIGURE 108. Lateroventral view of style
 FIGURE 109. Ventral view of plate
 FIGURE 110. Lateral view of pygofer

FIGURE 111-115. *Clinonaria zipha*
 FIGURE 111. Ventral view of aedeagus
 FIGURE 112. Lateral view of aedeagus
 FIGURE 113. Lateroventral view of style
 FIGURE 114. Ventral view of plate
 FIGURE 115. Lateral view of pygofer

FIGURE 116-120. *Clinonaria xantha*
 FIGURE 116. Ventral view of aedeagus
 FIGURE 117. Lateral view of aedeagus
 FIGURE 118. Lateroventral view of style
 FIGURE 119. Ventral view of plate
 FIGURE 120. Lateral view of pygofer

All drawn to the same scale.

two pairs of spines, which are slender and arise and curve from the end of the shaft. Those on the ventral surface arise slightly before the pair on the dorsal surface and are shorter, about one-sixth the length of shaft, and extend basad. Those arising from the dorsal surface extend laterally and are more than one-fourth as long as aedeagal shaft. Pygofer with prominent finger-like processes on dorso-caudal margin next to anal tube. A stout spine arises ventrally from inner pygofer wall and extends into genital chamber as far as anal tube. A stout spine arises dorsally on inner wall at base of finger-like process, extends into genital chamber, and curves back to anal tube.

Types.—Holotype male: Hacienda Maria, Cusca, Peru, March 24, 1952, F. L. Waytkowski, along R. Cosnipata, tropical jungle, 900 m.a.s.l. Paratypes: 3 males, same data as holotype. Holotype and paratypes in the North Carolina State University Collection. Paratype in the DeLong Collection.

***Clinonaria excerta* n. sp.**

(figs. 126–130, 358)

Length.—Male 12.5 mm. Female 14 mm.

Structure.—Crown broadly rounded, three times as wide between eyes at base as median length.

Coloration.—Crown yellow, with a darker longitudinal area on each side between reddish ocelli, and a pale median, longitudinal stripe which crosses crown, pronotum, and scutellum. Pronotum brown with paler areas along each lateral margin, which narrow to points and are directed diagonally toward but do not reach the anterior margin. Scutellum brown, a large paler spot at middle. Forewings brown.

Male genitalia.—Plates more than two and one-half times as long as broad, inner margins convexly rounded to form bluntly pointed apices on outer margin. Styles large at base, curved upon themselves, forming long blades which curve dorsally and are bluntly pointed. Aedeagal shaft slightly narrow at middle and continuing to apex, which bears three pairs of spines. The pair arising laterally, at the widest portion of aedeagus, is subapical and the longest, about one-fourth the length of shaft, and extends laterally. The pair arising ventrally is short, extending ventrally and basally. The pair arising dorsally at narrowed apex is short, about half the length of the lateral spines and extends laterally and basally. Pygofer with a pair of short, blunt thumb-like processes on dorso-caudal margin. A broad, stout spine arises on inner ventral pygofer wall on each side and extends into genital chamber beyond anal tube. A less stout spine arises on inner dorsal pygofer wall, on each side, and extends into genital chamber, and curves back to anal tube.

Female genitalia.—Seventh sternum with lateral angles produced and rounded, between which the posterior margin slopes basally to middle half, where it is abruptly and shallowly excavated, at the middle of which is a slightly produced lobe, notched at center.

Types.—Holotype male: Iquitos, Peru, F-6062, H. Bassler Collection Acc. 33591. Allotype female: same data as male. Holotype and allotype in the American Museum of Natural History Collection.

***Clinonaria supera* n. sp.**

(figs. 131–135)

Length.—Male 11.5 mm.

Structure.—Crown broadly rounded, about three times as wide between the eyes at base of median length.

Coloration.—Crown yellow, slightly darker between each red ocellus, and with a pale median longitudinal line that crosses crown, pronotum, and scutellum. Pronotum brown with two elongate, diagonal paler areas, tapered to a point, which arise at each humeral angle and extend diagonally toward but not reaching median line and anterior margin. Scutellum brown; median longitudinal line enlarged to form a spot on apical portion. Forewings brown.

Male genitalia.—Plates about three times as long as wide; inner margins convexly curved so as to form blunt apices on outer margin. Styles large at base, recurved upon themselves to form long blades, bluntly pointed at apex. Aedeagus narrowed about middle and continued to apex, which bears three pairs of spines. The lateral pair is sub-apical, arising at the widest

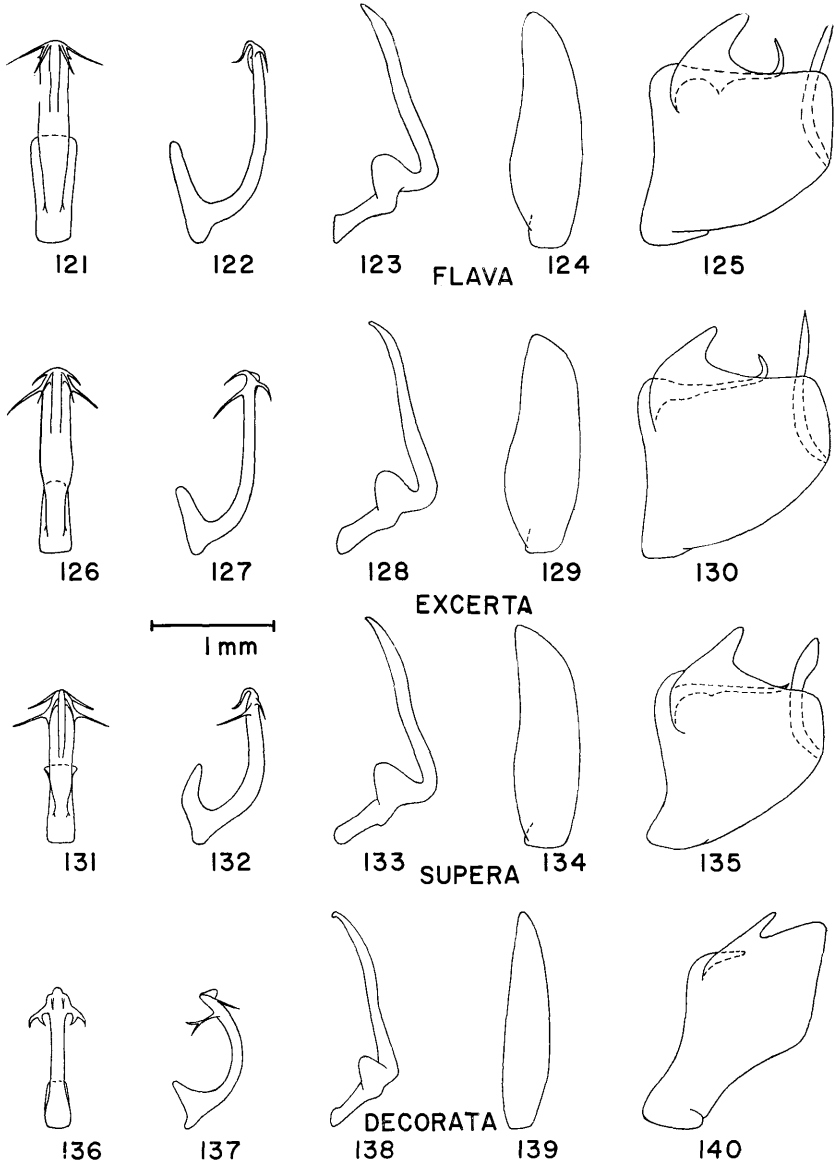


FIGURE 121-125. *Clinonaria flava*
 FIGURE 121. Ventral view of aedeagus
 FIGURE 122. Lateral view of aedeagus
 FIGURE 123. Lateroventral view of style
 FIGURE 124. Ventral view of plate
 FIGURE 125. Lateral view of pygofer
 FIGURE 126-130. *Clinonaria excerta*
 FIGURE 126. Ventral view of aedeagus
 FIGURE 127. Lateral view of aedeagus
 FIGURE 128. Lateroventral view of style
 FIGURE 129. Ventral view of plate
 FIGURE 130. Lateral view of pygofer

FIGURE 131-135. *Clinonaria supera*
 FIGURE 131. Ventral view of aedeagus
 FIGURE 132. Lateral view of aedeagus
 FIGURE 133. Lateroventral view of style
 FIGURE 134. Ventral view of plate
 FIGURE 135. Lateral view of pygofer
 FIGURE 136-140. *Clinonaria decorata*
 FIGURE 136. Ventral view of aedeagus
 FIGURE 137. Lateral view of aedeagus
 FIGURE 138. Lateroventral view of style
 FIGURE 139. Ventral view of plate
 FIGURE 140. Lateral view of pygofer

All drawn to the same scale.

portion of shaft, and extends laterally and basally to about one-fifth the length of shaft. The pair of spines arising ventrally are shortest, arise subapically, and extend basally. Those arising dorsally are apical and are intermediate in length, extending laterally and basally. Pygofer has a short finger-like process arising on the dorso-caudal margin. A broad, stout spine arises on the inner ventral pygofer wall and extends into genital chamber. A longer, more slender spine arises on the inner dorsal pygofer wall, is spear-shaped at apex, and extends under the pygofer.

Types.—Holotype male: Santa Fe, Darien Prov., Panama, 6-2-67, DeLong and Triplehorn. Paratype: 1 male, Trinidad Rio, Pan., 19-3-12, A. Busck Coll. Holotype in the DeLong Collection; paratype in the U. S. National Museum Collection.

Clinonaria decorata (Fowler)
(figs. 136-140, 359)

Gypona decorata Fowler, 1903, p. 311

Gypona decorata DeLong and Freytag, 1962, p. 110 (in part)

Gypona decorata DeLong and Freytag, 1964, p. 11 (in part)

Clinonaria decorata Freytag and DeLong, 1968, sp. 333.

Length.—Male 10 mm. Female 11 mm.

Structure.—Crown broadly rounded, almost transverse, more than twice as wide between eyes at base as median length.

Coloration.—Crown brown, with a dark margin and a longitudinal stripe between the red ocelli. Pronotum yellow, with darker mottling and dark vermiculate markings behind the eyes, and an interrupted broad, dark stripe continuing from crown. Scutellum brown, with a large, oval-shaped, yellow spot at middle. Forewings milky white with mottling of dark brown, especially concentrated in certain areas. Dark color spots along commissure at ends of claval veins; apices of wings, including apical cells and costal area at middle of wing, dark brown to black.

Male genitalia.—Plates rather narrow, about four times as long as broad; tips narrow and blunt. Outer margins thickly clothed with long pubescence. Styles with large bases, curved back upon themselves, forming slender blades which are narrow and blunt at apices. Aedeagal shaft slender, with an enlarged apex appearing as two lobes with broad apices. Median tube of shaft extends a little longer, beyond these lobes at middle. Two pairs of spines arise; one pair on ventral margin near tip which are slender and directed basad and proximal, and a pair of stouter spines which arise on the dorso-lateral margin and extend laterally and cephalad; spines branched at half their length forming two stout apical spines; each entire branched spine about one-sixth the length of shaft. Pygofer with a short, narrow, finger-like process on dorso-caudal margin.

Female genitalia.—Seventh sternum with lateral angles produced and forming broad, rounded lobes, between which the central third of the posterior margin is broadly, rather deeply excavated one-third the distance to base.

Type.—Holotype male from Bugaba, Panama, in the British Museum of Natural History collection.

Notes.—A total of nine specimens have been seen, all from Panama and Peru.

This species was placed in the Genus *Gypona* by the authors by mistake (1962 and 1964), because the genitalia placed with the type specimen in the British Museum of Natural History did not belong to it. The Holotype genitalia are actually missing from this distinctly colored specimen. The authors have recently corrected their error (1968).

Clinonaria fusca n. sp.
(figs. 141-145)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, more than three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum pale brown, rather thickly set with minute, brown, punctate spots, and larger and fewer round, dark brown spots. Scutellum brown, unmarked.

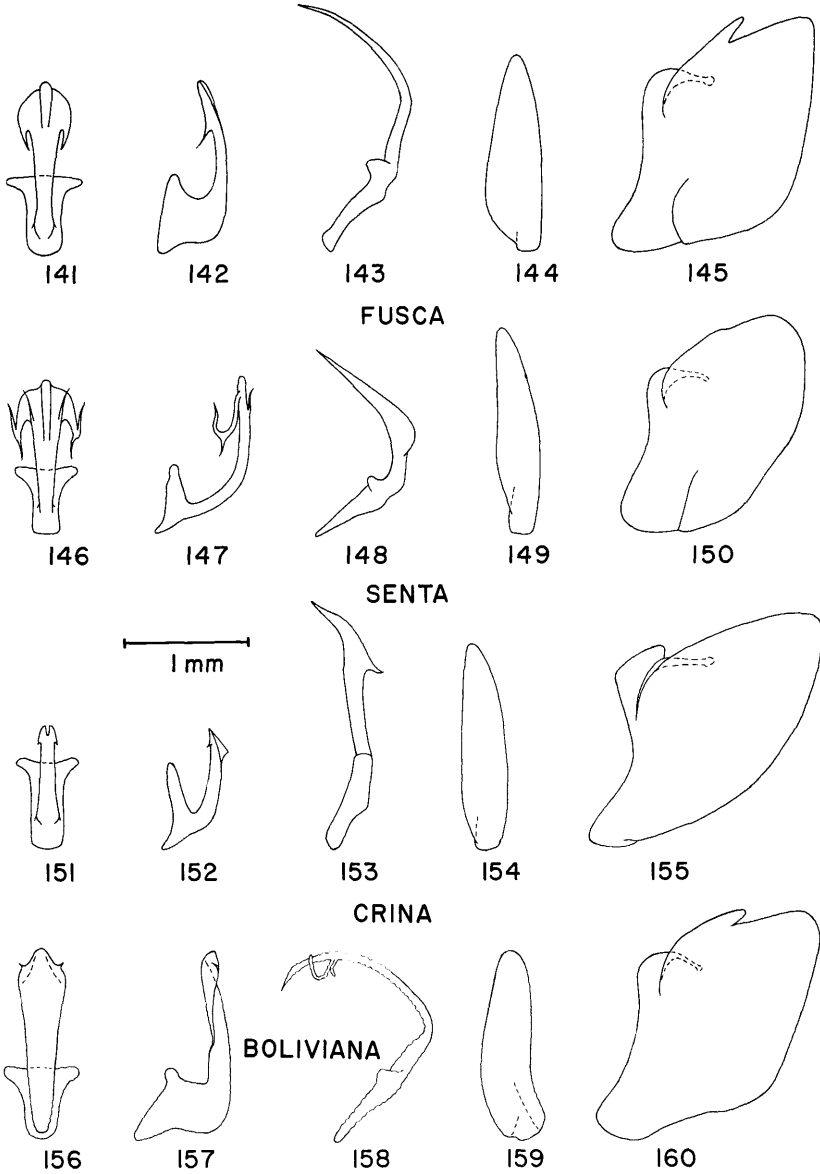


FIGURE 141-145. *Clinonaria fusca*
 FIGURE 141. Ventral view of aedeagus
 FIGURE 142. Lateral view of aedeagus
 FIGURE 143. Lateroventral view of style
 FIGURE 144. Ventral view of plate
 FIGURE 145. Lateral view of pygofer
 FIGURE 151-155. *Clinonaria crina*
 FIGURE 151. Ventral view of aedeagus
 FIGURE 152. Lateral view of aedeagus
 FIGURE 153. Lateroventral view of style
 FIGURE 154. Ventral view of plate
 FIGURE 155. Lateral view of pygofer

FIGURE 146-150. *Clinonaria senta*
 FIGURE 146. Ventral view of aedeagus
 FIGURE 147. Lateral view of aedeagus
 FIGURE 148. Lateroventral view of style
 FIGURE 149. Ventral view of plate
 FIGURE 150. Lateral view of pygofer
 FIGURE 156-160. *Clinonaria boliviana*
 FIGURE 156. Ventral view of aedeagus
 FIGURE 157. Lateral view of aedeagus
 FIGURE 158. Lateroventral view of style
 FIGURE 159. Ventral view of plate
 FIGURE 160. Lateral view of pygofer

All drawn to the same scale.

Forewings pale brown, with darker brown and pale mottling. A dark brown spot along commissure at the end of each claval vein.

Male genitalia.—Plates more than three times as long as broad, tapered to narrow rounded apices. Styles with rather broad, stout blades which curve outwardly at tips and are sharp-pointed. Aedeagus with basal process which bears lateral spines at apex. Aedeagal shaft narrow at middle, gradually broadened to an expanded, circular, head-like apex. Apex is slightly produced and bluntly pointed, due to the projecting ventral processes. The outer basal margins each bear a prominent curved spine which is directed basally and inwardly, thus forming a deep inverted notch between shaft and apical circular portion. Pygofer with a short, rather narrow, finger-like process on dorso-caudal margin. A short spine arises on inner margin of dorsal wall and extends a short distance caudally beneath pygofer wall.

Types.—Holotype male: Achinamiza, Peru, IX-20-27, F-6001, H. Bassler Collection Acc. 33591. Paratypes: 1 male, Rio Huallaga, Peru, IX-15-24, F-6121, H. Bassler Collection; 1 male, Middle Rio Ucayali, Peru, III-25-26, F-6116, H. Bassler Collection. Holotype and paratype in the American Museum of Natural History Collection; paratype in the DeLong Collection.

***Clinonaria senta* n. sp.**

(figs. 146-150)

Length.—Male 12 mm.

Structure.—Crown broadly rounded, almost three times as wide between eyes at base as median length.

Coloration.—Crown pale brown with irregular darker brown spots. Pronotum pale brown, an area behind inner margin of each eye and the posterior margin darker; a few irregular darker spots on disc. Scutellum pale brown, the basal angles darker. Forewing pale brown, mottled with darker brown; veins prominent.

Male genitalia.—Plates rather narrow, four times as long as broad, and narrowed and rounded at apices. Styles in lateral view broadened at middle by convexly rounded bulges on ventral margin, bent dorsally and tapered to sharp pointed apices. Aedeagal shaft narrowed at middle, gradually broadened to a crescent-shaped apex, with the ends extending basad, leaving a rounded, deep notch between shaft and tips of crescent. A pair of short, erect spines arise on the ventral margin at two-thirds the length of shaft and remains close to shaft, extending to top of crescent. Arms of crescent extend outwardly and downward, then produce two spines, one that extends basad, the other curved back upon itself and extending caudally almost to top of crescent. Pygofer rounded, a short spine arising on inner dorsal pygofer wall and extending caudally a short distance beneath pygofer wall.

Type.—Holotype male: Rio Casiquaire, Venezuela, IX-27-1928, Acc. 29500 Tate No. Holotype in the American Museum of Natural History Collection.

***Clinonaria crina* n. sp.**

(figs. 151-155)

Length.—Male 13.5 mm.

Structure.—Crown broadly rounded, about two and one-half times as wide between eyes at base as median length, with a slightly upturned carina at apex.

Coloration.—Crown rusty brown, with a few pale brown spots. Pronotum rusty brown, with irregular paler mottling. Scutellum rusty brown, unmarked. Forewings darker brown.

Male genitalia.—Plates long, narrow, about four times as long as wide, with long, heavy pubescence on base and outer margins. Styles long, broadened at two-thirds their length and bearing sharp-pointed curved spines on inner margins, then curved outwardly and tapered to sharp points. Aedeagus simple, tapering from base to slightly enlarged, rounded apex, which is deeply cleft at middle and bears a minute spine on each side at base next to shaft. Pygofer with a spine, one-third the length of the pygofer, arising at base on inner dorsal margin and extending along anal tube.

Type.—Holotype male: Tukeit, B. G., 19-V11, 1911. Holotype in the American Museum of Natural History Collection.

***Clinonaria boliviana* n. sp.**
(figs. 156-160)

Length.—Male 12 mm.

Structure.—Crown broadly rounded, almost three times as wide between eyes at base as median length.

Coloration.—Crown, pronotum, and scutellum dull brownish yellow, with a few small, dark brown spots between ocelli. Pronotum with numerous minute, darker, punctate spots; with four larger brown spots on disc; and with several paler spots across posterior fourth. Forewings dull yellow with pale brownish mottling, darker brown spots at terminus of claval veins along commissure, and prominent darker veins.

Male genitalia.—Plates short, about three times as long as wide, rounded at apices. Styles long, curved, slender, pointed apically. Aedeagus narrow at base, gradually broadened, forming a broad apex, which is curved on each side and flattened laterally, causing it to appear in ventral view as two apical spines. A short spine on outer portion of each lateral extremity of apex.

Type.—Holotype male: Rurrenabague, Bolivia, Nov. 1921, W. M. Mann Collector, in the U. S. National Museum Collection.

***Clinonaria sundara* n. sp.**
(figs. 161-165, 360)

Length.—Male 15 mm. Female 16.5 mm.

Structure.—Crown broadly rounded, about two and one-half times as wide between eyes at base as median length.

Coloration.—Crown, pronotum, and scutellum yellow, tinged with brown. Crown and pronotum with closely punctate brown spots, except for a large spot-free area just behind each eye. Scutellum without punctate spots in the basal and apical angles; a brown spot just posterior to middle. Forewings pale brown; claval area next to scutellum paler, with irregular mottling of pigment in most areas. Veins paler, prominent.

Male genitalia.—Plates more than three times as long as wide; apices narrowed, rounded. Styles large at base, curved upon themselves, forming broad blades which are broadened at middle by convexly curved inner margins, then narrowed at three-fourths their length and tapered to pointed apices. Aedeagal shaft large at base, greatly narrowed at about half its length, then gradually widened to apex, which bears a short, lateral spine on each side at widest portion of sub-apex; beyond this apex is divided, forming a thick-based spine on each side, which tapers to a slender, elongated tip, curved inwardly where both meet. Pygofer with a broad-based, stout spine arising at base of inner pygofer wall and extending along anal tube; narrowed on apical half and curved dorsally at apex.

Female genitalia.—Seventh sternum with produced, broadly rounded lateral angles, between which the posterior margin is broadly excavated almost one-third the distance to base and bearing on its middle fifth a slightly produced, broad, median lobe, which is slightly notched at middle.

Types.—Holotype male: Barro Colorado, Panama, 5-19-67, DeLong and Triplehorn. Allotype female: Same as holotype. Paratypes: 1 female, Darien Prov., Santa Fe, Pan., 6-2-67; 1 male, Barro Colo. Is., C. Z., April 41 at light, Jas. Zetek, No. 4776; 1 female, Barro Colo. Is., C. Z., IV-19-36, S. W. Frost Coll.; 1 male and 1 female, Barro Colo. Is., C. Z., 6-40 Jas. Zetek; 1 male, Trinidad River, Pan., May 3-11, August Busck; 2 females, Panama, Barro Colo. Is., 18-28-IV-64, W. D. and S. S. Duckworth; 1 female, Barro Colorado, C. Z., Nov. 1930, H. F. Schwarz Coll., 1 female, Barro Colo. Isl., C. Z., 1-8-1829, C. H. Curran Coll.; 1 female, Barro Colo., C. Z., 12-I-1936, F. E. Lutz Coll.; 2 females, Barro Colorado, C. Z., 19-III-36 and 8-II-36, collected by Bertsch, Lutz, Wood. Holotype, allotype, and paratypes in the DeLong Collection. Paratypes in the American Museum of Natural History, the North Carolina State University, and the U. S. National Museum Collections.

***Clinonaria sarana* (Osborn)**
(figs. 166-170, 361)

Ponana sarana Osborn, 1938, p. 42

Length.—Male 12.5 mm. Female 13 mm.

Structure.—Crown broadly rounded, three times as wide between eyes at base as median length.

Coloration.—Crown yellow, heavily mottled with brown. Pronotum yellow heavily mottled with brown; larger spots on disc and on posterior margin, the latter of which is bordered with brown. Scutellum pale with brownish pigment. Forewings pale with brown mottling.

Male genitalia.—Plates about four times as long as broad; apices narrowed and rounded. Styles with long, slender blades which are sharp-pointed at apices. Aedeagal shaft broad, rather uniform in width to near apex, where it is slightly widened, due to a pair of sharp-pointed spines, which arise on lateral margins about one-sixth the distance from apex and which are contiguous with the shaft. The tip of each spine extends slightly beyond the tip of shaft, which is cleft at middle and is composed of two proximal, narrow, rounded tips. Pygofer rounded at apex.

Female genitalia.—Seventh sternum with produced, rounded lateral margins, between which the posterior margin is deeply, roundedly excavated either side of a pair of rounded, median teeth, which are slightly produced, separated at middle by a broad V-shaped notch, and combined at about one-third the width of segment.

Type.—Holotype female from Bolivia, in the Carnegie Museum Collection.

Notes.—The male allotype and a male paratype are in the same collection. This species has been reported from Bolivia only, and a total of seven specimens was seen. The male genital structures are described here for the first time.

Clinonaria affinula (Osborn)
(figs. 171–175)

Ponana affinula Osborn, 1938, p. 44

Length.—Male 11 mm.

Structure.—Crown broadly rounded, three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum yellow, with posterior margin of pronotum brown, broadly bordered with dark brown, and with pale reddish flecks on pronotum. Scutellum brown with paler spots. Forewings pale with heavy mottling of dark brown.

Male genitalia.—Plates more than three times as long as broad, tapered, and with narrow, blunt apices. Styles with long blades, which are tapered and sharp-pointed. Aedeagus rather broad, narrowed at middle. Apex narrowed, slightly cleft, bearing a pair of slender spines, which arise on lateral margin, extend laterally, then curve cephalad and dorsally. Spines about one-fifth the length of shaft.

Type.—Holotype male from Bolivia, in the Herbert Osborn Collection, The Ohio State University.

Notes.—This species was originally described from Songo, Bolivia, but is now known from Peru. A total of 14 male specimens was seen.

Clinonaria cirra n. sp.
(figs. 176–180, 362)

Length.—Male 13 mm. Female 13.5 mm.

Structure.—Crown broad, almost transverse, only slightly produced at middle, twice as broad between eyes at base as median length.

Coloration.—Crown rusty brown; ocelli yellow, Pronotum rusty brown, with a paler area behind each eye and extending to lateral margins and humeral angles. Scutellum and forewings dull brown.

Male genitalia.—Plates long and narrow, about five times as long as wide; apices narrow and rounded, a thick tuft of long pubescence arising at base. Styles blade-like, narrow near base, then broadened at middle, slightly broadened just before apices, then tapered to pointed tips. Aedeagal shaft in ventral view appearing rather slender, with a pair of blade-like processes arising on ventral margin at about half its length and extending parallel and proximal to shaft almost to apex. Pygofer with a short, thick process arising on inner dorsal wall and extending along anal tube.

Female genitalia.—Seventh sternum with lateral angles broadly rounded, forming posterior

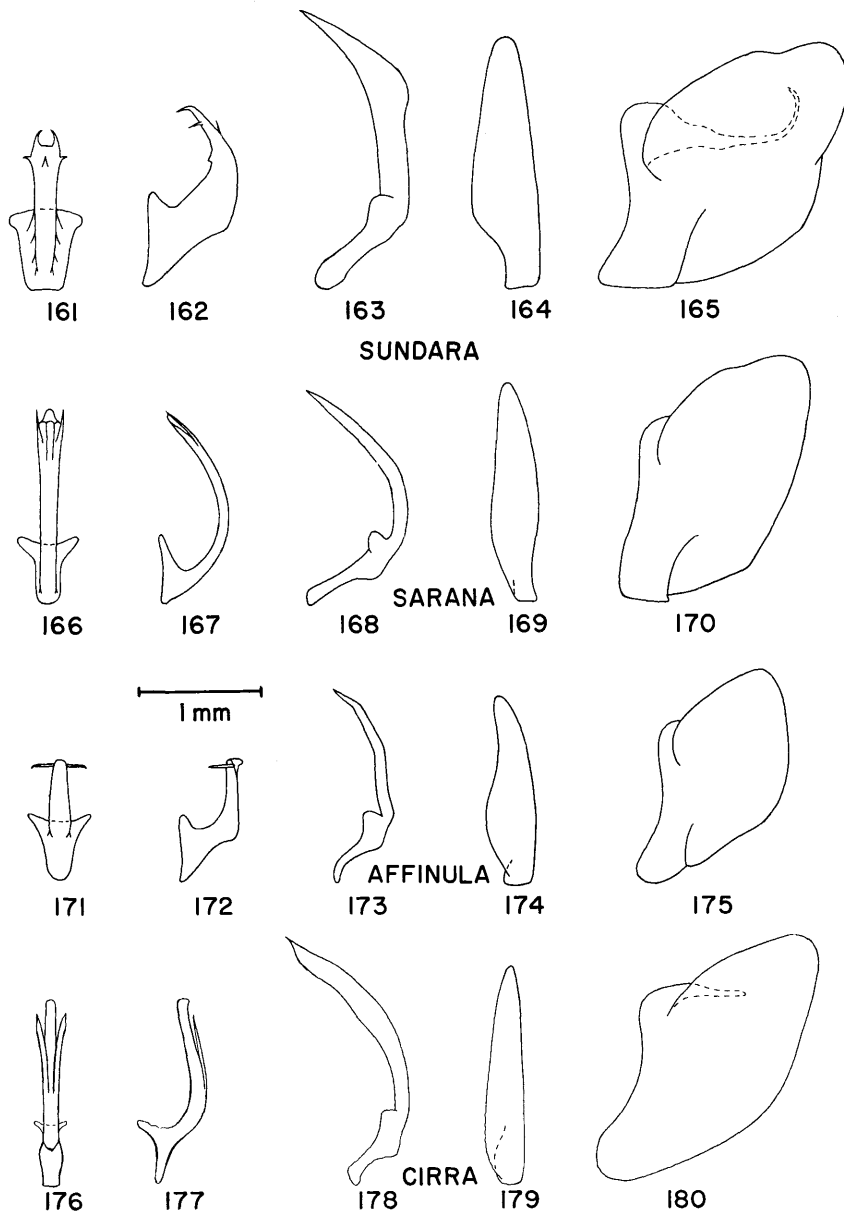


FIGURE 161-165. *Clinonaria sundara*
 FIGURE 161. Ventral view of aedeagus
 FIGURE 162. Lateral view of aedeagus
 FIGURE 163. Lateroventral view of style
 FIGURE 164. Ventral view of plate
 FIGURE 165. Lateral view of pygofer

FIGURE 166-170. *Clinonaria sarana*
 FIGURE 166. Ventral view of aedeagus
 FIGURE 167. Lateral view of aedeagus
 FIGURE 168. Lateroventral view of style
 FIGURE 169. Ventral view of plate
 FIGURE 170. Lateral view of pygofer

FIGURE 171-175. *Clinonaria affinula*
 FIGURE 171. Ventral view of aedeagus
 FIGURE 172. Lateral view of aedeagus
 FIGURE 173. Lateroventral view of style
 FIGURE 174. Ventral view of plate
 FIGURE 175. Lateral view of pygofer

FIGURE 176-180. *Clinonaria cirra*
 FIGURE 176. Ventral view of aedeagus
 FIGURE 177. Lateral view of aedeagus
 FIGURE 178. Lateroventral view of style
 FIGURE 179. Ventral view of plate
 FIGURE 180. Lateral view of pygofer

All drawn to the same scale.

margin which is deeply excavated, half-way to base, on median third of segment. The excavation is angled on basal half, forming a rounded V-shaped apex.

Types.—Holotype male: Bartica, Br. Guiana 4-5. Allotype female: Bartica, Br. Guiana, 6-10. Paratypes: 1 male, British Guiana: Essequibo R., Moraballi Creek, 4, XI, 1929 Oxf. Univ. Expedn. B. M. 1929-485; 1 male, same except 16-XI-1929; 1 male, Mt. Duida, Venezuela XI-9, 1928 Ac. 29500, Tate No. 210. Holotype and allotype in the U. S. National Museum Collection. Paratypes in the British Museum of Natural History, the American Museum of Natural History, and the DeLong Collections.

***Clinonaria notha* n. sp.**

(figs. 181-185)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, more than twice as wide between eyes at base as median length.

Coloration.—Crown rusty brown with paler mottling. Pronotum rusty brown, with a paler area on each side behind eye extending to lateral margin and to humeral angle, with even paler mottling. Scutellum rusty brown. Forewings same color, but with small, white spots scattered over wings.

Male genitalia.—Plates long and slender, about seven times as long as broad, with narrow rounded apices, a large tuft of long pubescence arising at base and a fringe of long hair along outer margins. Styles in ventral view broadened at middle, then narrowed, curved, bent, and tapered to pointed apices. Aedeagus in ventral view with a pair of narrow spines arising on ventral margin of shaft before middle and extending along shaft, bent slightly outwardly and reaching almost to apex. Pygofer with a rather short, broad process arising on each side, on inner dorsal margin, and extending along anal tube.

Types.—Holotype male: Peru: Yurac, 67 mi E. of Tingo Maria, XI-16-1954, E. I. Schlinger and E. S. Ross collectors. Paratype male: same data as holotype. Holotype and paratype in the California Academy of Science Collection.

***Clinonaria confusa* n. sp.**

(figs. 186-190)

Length.—Male 12.5 mm.

Structure.—Crown broadly rounded, more than twice as broad between eyes at base as median length.

Coloration.—Crown reddish brown, paler on basal portion. Pronotum brown with heavy paler mottling, lateral areas paler. Scutellum rusty brown. Forewings rusty brown, sparsely mottled with white.

Male genitalia.—Plates elongate, about four times as long as broad; apices rounded, a heavy tuft of long pubescence arising at base, and outer margins bearing a fringe of long hair. Styles sword-like, narrow at base, with broadened blades which are abruptly narrowed near apex to sharp-pointed tips. Aedeagus broad in ventral view; a pair of long, slender processes arising before middle from lateral margins and extending along shaft on each side to near apex. Shaft is narrowed just beyond origin of processes, then is convexly broadened before tapering to form a narrow apex. Pygofer with a pair of short, rather slender processes arising on inner dorsal pygofer wall and extending a short distance along anal tube.

Types.—Holotype male: Upper Rio Maranon, Peru, XII-29-24, F. 6101 H. Bassler Collection Acc. 33591. Paratype male: Rio Santiago, Peru, XI-5-24, F. 6198 H. Bassler Collection Acc. 33591. Holotype and paratype in the American Museum of Natural History Collection.

***Clinonaria sagula* n. sp.**

(figs. 191-195)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, more than twice as wide between eyes at base as median length.

Coloration.—Crown rusty brown with paler irregular spots. Pronotum rusty brown with

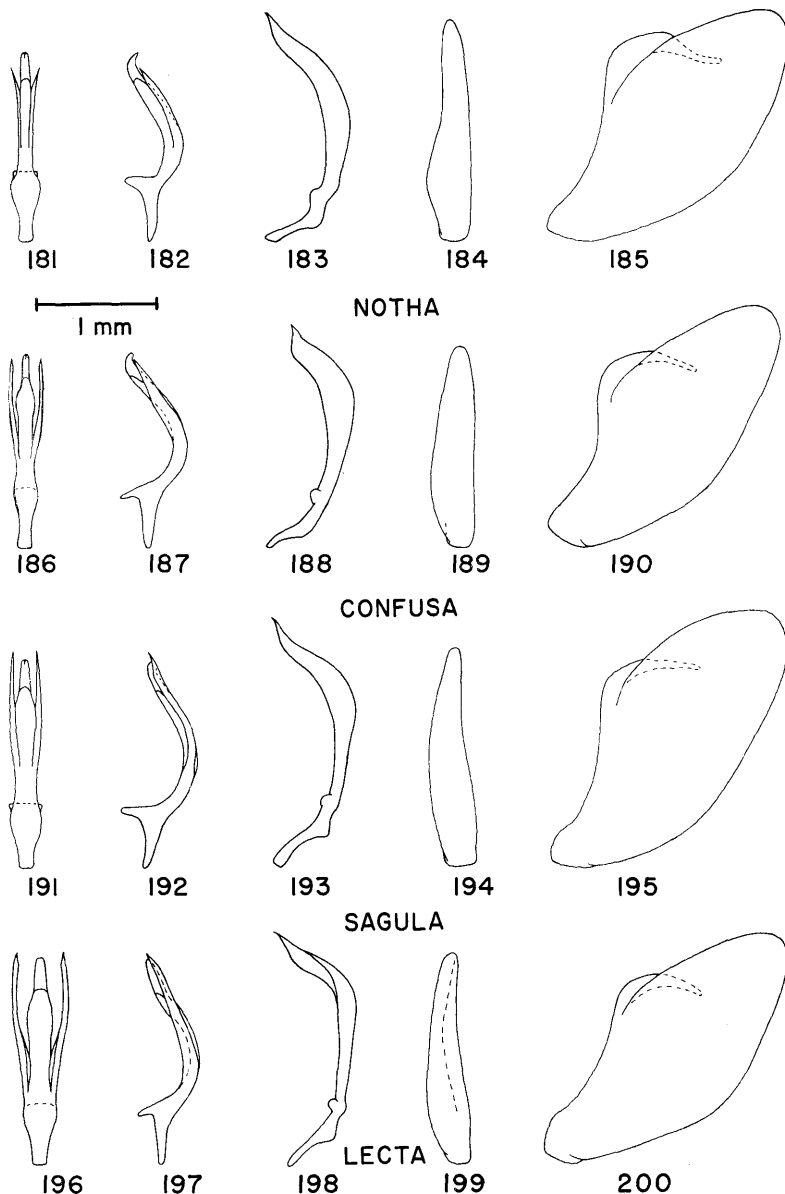


FIGURE 181-185. *Clinonaria notha*
 FIGURE 181. Ventral view of aedeagus
 FIGURE 182. Lateral view of aedeagus
 FIGURE 183. Lateroventral view of style
 FIGURE 184. Ventral view of plate
 FIGURE 185. Lateral view of pygofer
 FIGURE 186-190. *Clinonaria confusa*
 FIGURE 186. Ventral view of aedeagus
 FIGURE 187. Lateral view of aedeagus
 FIGURE 188. Lateroventral view of style
 FIGURE 189. Ventral view of plate
 FIGURE 190. Lateral view of pygofer

FIGURE 191-195. *Clinonaria sagula*
 FIGURE 191. Ventral view of aedeagus
 FIGURE 192. Lateral view of aedeagus
 FIGURE 193. Lateroventral view of style
 FIGURE 194. Ventral view of plate
 FIGURE 195. Lateral view of pygofer
 FIGURE 196-200. *Clinonaria lecta*
 FIGURE 196. Ventral view of aedeagus
 FIGURE 197. Lateral view of aedeagus
 FIGURE 198. Lateroventral view of style
 FIGURE 199. Ventral view of plate
 FIGURE 200. Lateral view of pygofer

All drawn to the same scale.

paler areas on lateral margins. Scutellum rusty brown. Forewings rusty brown, with a few paler spots.

Male genitalia.—Plates elongate, about six times as long as broad; apices rounded, a large tuft of heavy pubescence arising at base, and with outer margins heavily fringed with long hairs. Styles sickle-shaped, with the blades broad at middle, bent near apex, and tapered to pointed tips. Aedeagus appearing broad in ventral view, narrowed near middle where a pair of long, slender processes arise on ventro-lateral margins. These processes extend along shaft and beyond apex. The shaft is narrowed just beyond the point of origin of the processes, then slightly broadens and again narrows, and is produced to a slender apex.

Type.—Holotype male: P. del Sara, Bol., Acc. 5064, Steinbach, in the Carnegie Museum Collection.

***Clinonaria lecta* n. sp.**

(figs. 196–200)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, only slightly produced, more than twice as broad between eyes at base as median length.

Coloration.—Crown rusty brown, ocelli red. Pronotum reddish brown with paler mottling; lateral areas a little paler. Scutellum and forewings rusty brown; a few paler spots on forewings.

Male genitalia.—Plates elongate, about four times as long as broad; apices narrowed and rounded, with a large tuft of heavy pubescence arising at base, and outer margins heavily fringed with long hairs. Styles sickle-shaped, with the blades broadened on apical half, then abruptly curved inwardly to form sharp-pointed apices. Aedeagus broad in ventral view. A pair of long, broad processes arise before middle on latero-ventral margin and extend along shaft, on either side, beyond its apex. Shaft remains broad just beyond origin of the processes, broadens a little, then narrows to produce a slender apex.

Types.—Holotype male: Yavita, Arleo Colr., VI-52, Exp. Fco. Ven., Alto Orinoco, in the U. S. National Museum. Paratype: 1 male, Marituba Sta., Isabel do Para, Pa; VIII-17-1962, J. Belchynne colr., in the Department de Zoologiaure da Secretaria de Agricultura Collection, Sao Paulo, Brazil.

***Clinonaria trifaciata* n. sp.**

(figs. 201–205)

Length.—Male 14 mm.

Structure.—Crown broadly rounded, more than two and one-half times as wide between eyes at base as median length.

Coloration.—Crown brown with paler brownish areas. Pronotum brown, with three pale, narrow, curved bands, which are parallel with anterior margin. One band is on margin next to crown, another is about one-third length of pronotum, and the third band extends from humeral angles and is about two-thirds length of pronotum. Scutellum dark brown. Forewings dull brownish, marked with paler areas, and with two large round black spots on the disc.

Male genitalia.—Plates long, four times as long as broad, tapered to bluntly pointed apices. Styles long, narrow, tapered to slender pointed apices. Aedeagal shaft simple, broad at base, and tapered to a slender, blunt apex. A ventral slender process fits within the shaft. A pair of processes arise ventrally near base of shaft, which are long, narrow, and broadened at half their length to form blades like double-edged swords, which taper rapidly on both edges to form median pointed apices, and extend beyond the apex of shaft. Pygofer with long, heavy, curved spines, which arise on inner dorsal pygofer wall and curve into genital chamber.

Type.—Holotype male: Mapo R., Peru, VII-1919, in the DeLong Collection.

***Clinonaria aurantium* n. sp.**

(figs. 206–210)

Length.—Male 12 mm.

Structure.—Crown broadly rounded, about two and one-half times as broad between eyes at base as median length.

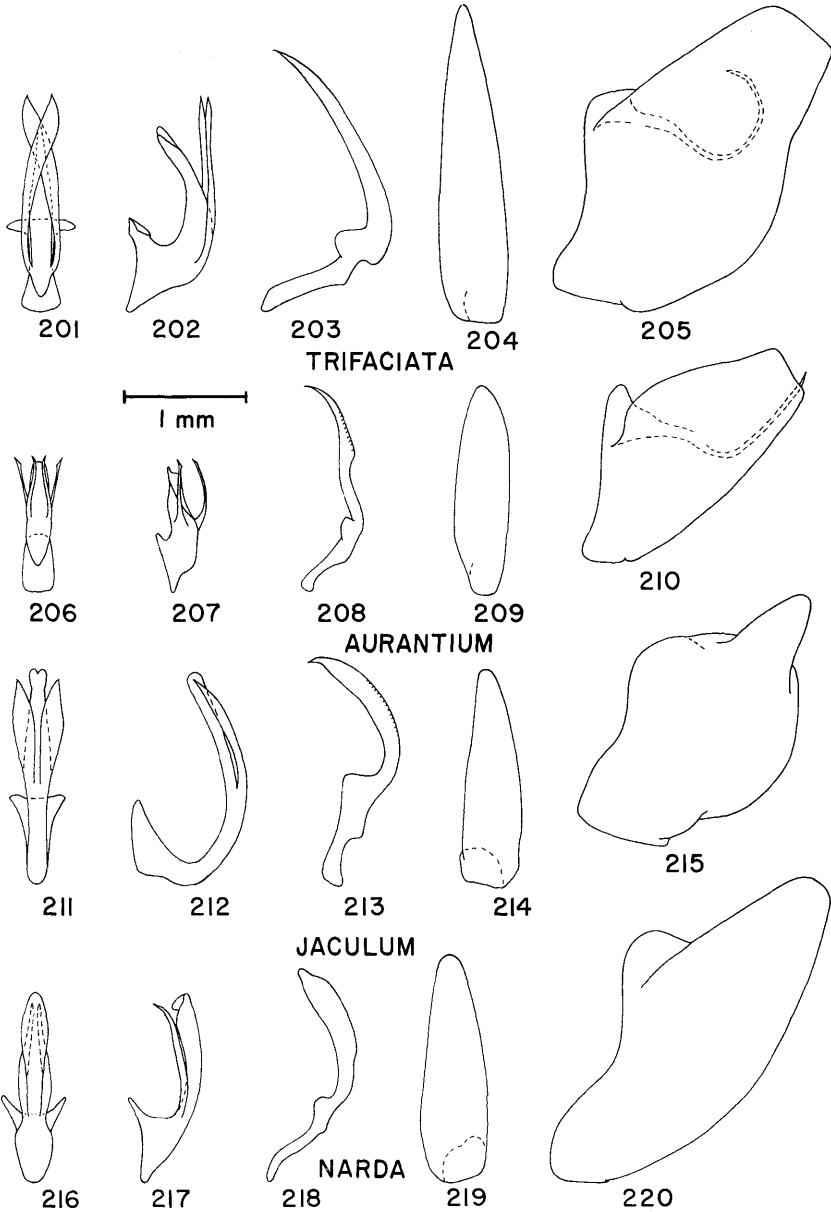


FIGURE 201-205. *Clinonaria trifaciata*
 FIGURE 201. Ventral view of aedeagus
 FIGURE 202. Lateral view of aedeagus
 FIGURE 203. Lateroventral view of style
 FIGURE 204. Ventral view of plate
 FIGURE 205. Lateral view of pygofer
 FIGURE 206-210. *Clinonaria aurantium*
 FIGURE 206. Ventral view of aedeagus
 FIGURE 207. Lateral view of aedeagus
 FIGURE 208. Lateroventral view of style
 FIGURE 209. Ventral view of plate
 FIGURE 210. Lateral view of pygofer

FIGURE 211-215. *Clinonaria jaculum*
 FIGURE 211. Ventral view of aedeagus
 FIGURE 212. Lateral view of aedeagus
 FIGURE 213. Lateroventral view of style
 FIGURE 214. Ventral view of plate
 FIGURE 215. Lateral view of pygofer
 FIGURE 216-220. *Clinonaria narda*
 FIGURE 216. Ventral view of aedeagus
 FIGURE 217. Lateral view of aedeagus
 FIGURE 218. Lateroventral view of style
 FIGURE 219. Ventral view of plate
 FIGURE 220. Lateral view of pygofer

All drawn to the same scale.

Coloration.—Crown orange-reddish. Pronotum dull brown with a broad, interrupted transverse, orange-red band across middle. Central portion of band, on disc, brown. Scutellum brown, posterior half orange. Forewings dull brown, with paler areas; a brown spot at the end of each claval vein along commissure.

Male genitalia.—Plates long, three and one-half times as long as broad; apices rounded. Styles long, slender, in lateral view slightly broadened at middle, then tapered to upturned sharp-pointed tips. Aedeagus with a pair of slender processes arising on ventral margin of shaft at about two-thirds its length and extending caudally to apex; shaft bent dorsally at two-thirds its length; a second pair of lateral processes arising laterally half way between the first pair of processes and apex and extending caudally beyond apex of shaft. Pygofer with a pair of long spines which arise on inner dorsal wall and extend into genital chamber, and which narrow and taper at half their length to form slender spines.

Type.—Holotype male; Yurac, Peru, 67 m. E. of Tingo Maria XI-16-1954 E. I. Schlinger and E. S. Ross collectors, in the California Academy of Science Collection.

***Clinonaria jaculum* n. sp.**

(figs. 211-215)

Length.—Male 13.5 mm.

Structure.—Crown broadly rounded, more than two and one-half times as wide between the eyes as median length.

Coloration.—Crown and pronotum rusty brown, with darker punctate spots and paler areas. Scutellum dark rusty brown. Forewings dull brown, mottled with paler brown.

Male genitalia.—Plates about four times as long as broad, narrowed and rounded at apices. Styles rather thick, curved dorsally; apices pointed. Aedeagal shaft stout, with a pair of broadened leaf-like processes arising at two-thirds the length of shaft and extending along shaft on ventral and lateral margins slightly beyond apex. Pygofer simple.

Types.—Holotype male: Yurac, Peru, 67 m. E. of Tingo Maria XI-16-1954 E. I. Schlinger and E. S. Ross collectors. Paratypes: 4 males, same data as holotype; 1 male, Peru: Monson Valley, Tingo Maria, X-26, 1954; 1 male, same data except 12-18-1954. Holotype and paratypes in the California Academy of Science Collection; paratype in DeLong Collection.

***Clinonaria narda* n. sp.**

(figs. 216-220, 363)

Length.—Male 15.5 mm. Female 16 mm.

Structure.—Crown broadly rounded, more than two and one-half times as long between eyes at base as median length.

Coloration.—Crown dark rusty brown, with a few pale spots at base. Pronotum dark rusty brown mottled with yellow, a large paler area at each side next to humeral angles. Scutellum dark rusty brown. Forewings rusty brown mottled with paler brown.

Male genitalia.—Plates short, narrow, about five times as long as broad; apices rounded. Styles narrow at base, greatly broadened on apical half; apices narrow, blunt. Aedeagus with a pair of long, slender processes arising laterally at about half the length of the shaft, extending under shaft to its apex, the processes tapering to fine apices and turning upward.

Female genitalia.—Seventh sternum with lateral angles produced and rounded to posterior margin, which slopes cephalad toward middle, then is slightly roundly excavated on either side of a pair of median narrow, rounded lobes. Lobes are slightly produced and are separated by a narrow V-shaped notch, which extends about one-fourth the distance to base.

Types.—Holotype male: Sinchono, Peru, XI-43, J. G. Sanders. Allotype female: Caralinya Peru. Paratypes: 2 males, same as holotype; 2 males, Santa Isabel, Dept. Cusco, Peru, November 30, 1951, Felix L. Waytkowski; 1 male, Upper Rio Marañon, Peru, XII-29-24, F-6101, H. Bassler Collection; 1 male, Ecuador. Holotype and paratype in the DeLong Collection. Allotype and paratype in the U. S. National Museum Collection. Paratypes also in the American Museum of Natural History and the North Carolina State College Collections.

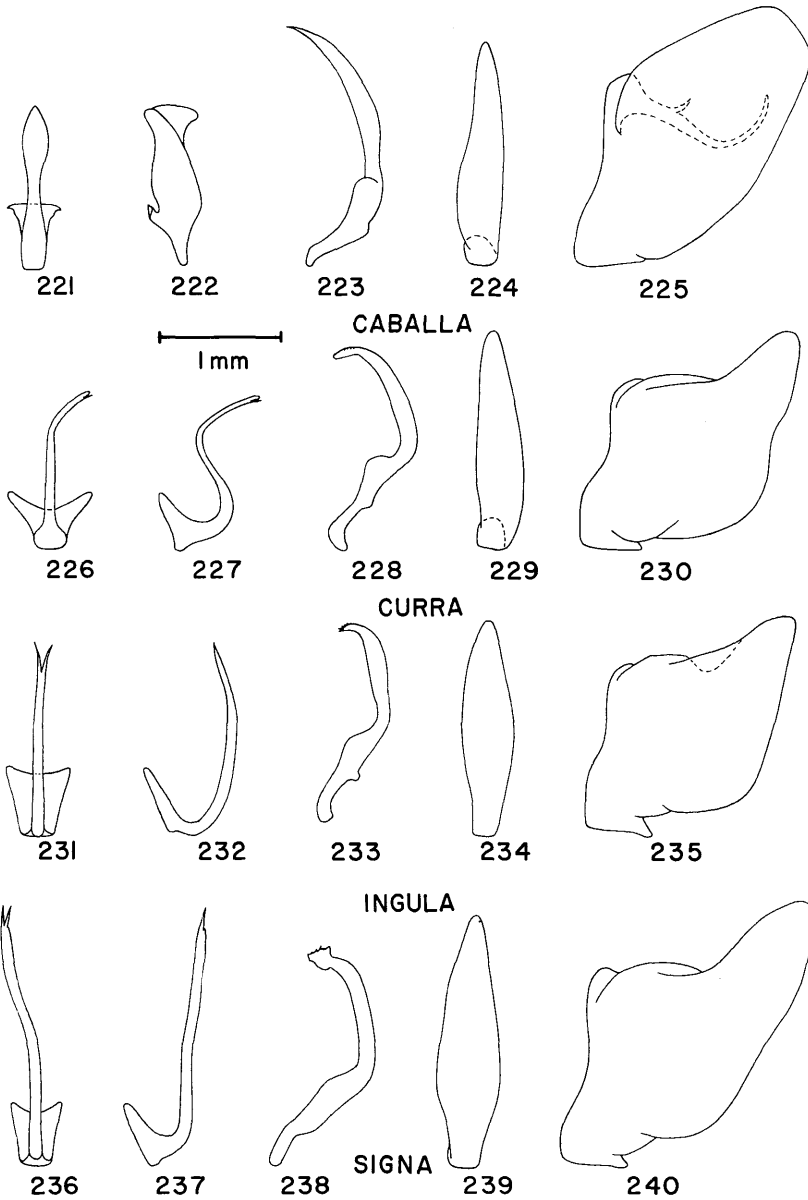


FIGURE 221-225. *Clinonaria caballa*
 FIGURE 221. Ventral view of aedeagus
 FIGURE 222. Lateral view of aedeagus
 FIGURE 223. Lateroventral view of style
 FIGURE 224. Ventral view of plate
 FIGURE 225. Lateral view of pygofer

FIGURE 226-330. *Clinonaria cirra*
 FIGURE 226. Ventral view of aedeagus
 FIGURE 227. Lateral view of aedeagus
 FIGURE 228. Lateroventral view of style
 FIGURE 229. Ventral view of plate
 FIGURE 230. Lateral view of pygofer

FIGURE 231-235. *Clinonaria ingula*
 FIGURE 231. Ventral view of aedeagus
 FIGURE 232. Lateral view of aedeagus
 FIGURE 233. Lateroventral view of style
 FIGURE 234. Ventral view of plate
 FIGURE 235. Lateral view of pygofer

FIGURE 236-240. *Clinonaria signa*
 FIGURE 236. Ventral view of aedeagus
 FIGURE 237. Lateral view of aedeagus
 FIGURE 238. Lateroventral view of style
 FIGURE 239. Ventral view of plate
 FIGURE 240. Lateral view of pygofer

All drawn to the same scale.

***Clinonaria caballa* n. sp.**

(figs. 221-225)

Length.—Male 13 mm.*Structure.*—Crown broadly rounded, more than two and one-half times as wide between eyes at base as median length.*Coloration.*—Crown pale brown. Pronotum pale brown, with a few darker markings just back of crown, and with darker brown on disc and posterior portion. Scutellum dark brown, with basal and apical angles paler. Forewings pale brown, with numerous darker brown mottlings on entire wing.*Male genitalia.*—Plates about four times as long as broad, apices rounded. Styles long, rather slender, with apices tapered to a point and turned upward. Aedeagus slender in ventral view, broad in lateral view, with a broadened blunt apex. Pygofer with a pair of long, stout spines arising on the inner dorsal wall and extending into the genital chamber. A long spur arises on each spine at about half its length.*Types.*—Holotype male: Huallaga R. Valley, tropical jungle 500 m.a.s.l., Huanuco, Peru, March 1954, F. L. Waytkowski. Paratypes: 1 male, Hacienda Maria, Cusca, Peru, March 12, 1952, F. L. Waytkowski, along R. Cosnipata tropical jungle 500 m.a.s.l.; 1 male, same except March 5, 1952; 1 male, same except March 6, 1952; 1 male, same except Feb. 24, 1952; 1 male, Mt. Duida Venezuela 11-15-1928, Acc. 29500, Tate No. 334. Holotype and paratypes in the North Carolina State College Collection; paratypes also in the American Museum of Natural History and the DeLong Collections.***Clinonaria curra* n. sp.**

(figs. 226-230)

Length.—Male 12.5 mm.*Structure.*—Crown broadly rounded, more than twice as wide between eyes at base as median length.*Coloration.*—Crown and pronotum pale brown, rather heavily marked with dark brown, punctate spots. Scutellum same color, with apical half a little paler. Forewings dull brown, with some irregular mottling with paler brown.*Male genitalia.*—Plates about three times as long as wide, apices rounded. Styles stout, rather short; apices enlarged, each forming an oval head-like apex armed with short spines. Aedeagal shaft long, tapered, curved, with slender, pointed apex.*Types.*—Holotype male: Prov. del Sara, Bol., Steinbach, C. M. Acc. 5064. Paratypes: 1 male, same as holotype; 1 male, Sta. Cruz. la Sierra, Bol., 450 M, J. Steinbach; 1 male, Peru, S. A. F. Waytkowski collector, Herbert Osborn Collection. Holotype and paratype in the Carnegie Museum Collection. Paratypes in the Osborn and the DeLong Collections.***Clinonaria ingula* n. sp.**

(figs. 231-235)

Length.—Male 14 mm.*Structure.*—Crown broadly rounded, about two and one-half times as wide between eyes at base as median length.*Coloration.*—Crown and pronotum pale brown, heavily marked with dark brown, punctate spots. Scutellum darker brown, with scattered dark punctate spots. Forewings rusty brown, marked with paler mottling.*Male genitalia.*—Plates about four times as long as wide, apices rounded. Styles in lateral view rather broad; apical portion curved dorsally; apices truncate, with teeth. Aedeagal shaft long and straight, with a pair of slender processes arising on ventral side not far from apex and extending caudally beyond apex.*Types.*—Holotype male: Sinchono, Peru, XI-43, J. G. Sanders. Paratypes: 8 males, same as holotype; 1 male, Ecuador, W. Von Hagen, Ac. 33930; 1 male, Unt. Amaz. Taperimbo b. Santerem, 21-30-VI-27, Zerny. Holotype and paratypes in the DeLong Collection. Paratypes also in the U. S. National Museum Collection and in the Vienna Museum.

***Clinonaria signa* n. sp.**

(figs. 236-240)

Length.—Male 13 mm.*Structure*.—Crown broadly rounded, more than two and one-half times as wide between eyes at base as median length.*Coloration*.—Crown and pronotum pale brown, heavily set with minute dark punctate spots. Scutellum dark brown, with paler central area. Forewings dull brown with paler mottling.*Male genitalia*.—Plates about four times as long as broad; apices narrow, rounded. Styles in lateral view broad, bent abruptly dorsally, and narrowed just before enlarged head-like apex. Ventral margin armed with teeth. Aedeagus long, slender, with a pair of slender, pointed spines arising on ventral margin of shaft at three-fourths its length and extending caudally beyond the apex of shaft.*Type*.—Holotype male: E. Bolivia, Nuflo de Chavez Esperanza, 1926-1929, B. M. 1934-167, in the British Museum of Natural History Collection.***Clinonaria lira* n. sp.**

(figs. 241-245)

Length.—Male 13 mm.*Structure*.—Crown broadly rounded, three times as wide between eyes at base as median length.*Coloration*.—Crown and pronotum pale brown, with many minute dark punctate dots; paler on sides of pronotum. Scutellum pale brown, with dark punctate dots; basal angles dark brown. Forewings dull rusty brown with paler mottling.*Male genitalia*.—Plates about three and one-half times as long as wide, apices bluntly pointed. Styles in lateral view broad, apical fifth bent sharply dorsally, tapered to sharp-pointed tips and each bearing a long, pointed tooth or spur on ventro-caudal margin not far from apex. Aedeagus long, rather slender, with a pair of long, slender processes arising on ventral margin at about three-fourths the length of shaft, curving laterally and extending well beyond slender apex of shaft.*Types*.—Holotype male: Upper Rio Maranon, Peru, I-15-29, F. 093, H. Bassler Collection, Acc. 33591. Paratypes: 1 male, Rio Ucayali, Peru, X-3-23, F. 6004, H. Bassler Collection, Acc. 33591; 3 males, Prov. del Sara, Bolivia, 450 m., J. Steinbach, Nov. 1909, C. M. Acc. 4549; 1 male, Hacienda Maria Cusca, Peru, March 18, 1952, F. L. Waytkowski; 1 male, S. P. Olivencia, Amazonas, Brazil, VII-32, A. Maller Coll., Frank Johnson donor; 1 male, Caunma, Amazonas, Brazil, VIII-32, A. Maller Coll., Frank Johnson donor; 1 male, Ecuador, W. von Hagen, Acc. 33930. Holotype and paratype in the American Museum of Natural History Collection; paratypes also in the Carnegie Museum, the North Carolina State College Museum, and the DeLong Collection.***Clinonaria astra* n. sp.**

(figs. 246-250)

Length.—Male 13.5 mm.*Structure*.—Crown broadly rounded, more than two and one-half times as wide between eyes at base as median length.*Coloration*.—Crown and pronotum pale brown, densely set with minute, dark brown, punctate spots. Scutellum same color and markings, with basal angles dark brown. Forewings dark brown with pale mottling.*Male genitalia*.—Plates four times as long as broad; apices rounded. Styles in lateral view rather broad, narrowed at four-fifths their length, and with the apical portion bent dorsally, forming inverted "foot-like" apices, with spur on ventral margin forming "heel." Aedeagus with a long, rather stout shaft, the inner portion of shaft protruding on ventral side at apex and extending as long as shaft.*Types*.—Holotype male; Callanga, Peru. Paratype male: Tingo Maria, Huan., Peru, Nov. 27, 1946, Alt. 2200 ft. J. C. Pallister Coll. Donor Frank Johnson. Holotype in the U. S. National Museum Collection. Paratype in the American Museum of Natural History Collection.

***Clinonaria marita* n. sp.**

(figs. 251-255, 364)

Length.—Male 11.5 mm. Female 13 mm.*Structure.*—Crown broadly rounded, more than three times as wide between eyes at base as median length.*Coloration.*—Crown, pronotum, and scutellum pale brown, with darker brown, minute, punctate spots. Scutellum with dark brown basal angles. Forewings rusty brown, with a few mottlings of paler brown.*Male genitalia.*—Plates about three and one-half times as long as wide. Styles tapered at two-thirds their length, concave on inner margin to form slender, sharp-pointed apices; with two or more sharp-pointed spurs or teeth on inner margin not far from apex. Aedeagus with a pair of short, slender processes arising on ventral margin at about three-fourths the length of shaft, extending apically along shaft but not reaching apex.*Female genitalia.*—Seventh sternum with lateral angles produced and rounded to posterior margin, which is broadly excavated one-third the distance to base, to a median-produced lobe, one-fourth the width of segment. Lobe is produced about one-eighth the length of segment, and is broadly, shallowly concave apically.*Types.*—Holotype male: Capada, Brazil, Jan., C. F. Baker Collector. Allotype female: same as holotype except June. Paratypes: 15, all same as holotype except date; 1 male, 1 female, Dec.; 1 male, Jan.; 3 females, Apr.; 3 females, May; 3 females, June; 1 female, July; 2 females, Oct.; 1 female, Rio de Janeiro, Sept. 2, 52, Collection C. F. Baker. Holotype, allotype, and paratypes in the U. S. National Museum Collection. Paratypes also in the DeLong Collection.***Clinonaria maculosa* n. sp.**

(figs. 256-260)

Length.—Male 15 mm.*Structure.*—Crown broadly rounded, more than two and one-half times as broad between eyes at base as median length.*Coloration.*—Crown yellow, with a faint brown transverse line anterior to ocelli. Anterior two-thirds of pronotum yellow with pale brown markings; posterior third, dark brown. Scutellum brown, with faint yellow markings at sides. Forewings dark brown, with numerous large yellow mottlings.*Male genitalia.*—Plates about five times as long as wide, with a large tuft of long pubescence arising at base and long hairs arising on outer margins; tips of plates bluntly pointed. Styles narrowed at half their length; apical portions bent dorsally, apices blunt. Aedeagus in ventral view broad, widened just before apex, with a short, stout spine arising laterally on each side of shaft and curving apically. Apex of shaft broad, truncate. Pygofer with a short, stout spine extending caudally from ventro-caudal margin.*Type.*—Holotype male: Santa Isabel, Dept. Cusco, Peru, November 20, 1951, Felix L. Waytkowski, in the North Carolina State University Collection.***Clinonaria sida* n. sp.**

(figs. 261-265)

Length.—Male 13 mm.*Structure.*—Crown broadly rounded, more than twice as broad between eyes at base as median length.*Coloration.*—Crown yellow; ocelli red. Pronotum yellow, flecked with pale brown; posterior margin broadly bordered with brown. Scutellum pale brown, basal angles darker; a spot at middle and lateral margins all paler. Forewings pale brown, mottled with darker brown.*Male genitalia.*—Plates about three and one-half times as long as wide, apices bluntly pointed. Styles slender, curved upward at apices, which are flat and thin and appear enlarged in ventral view. Aedeagus shaft broad, widened on ventral margin apically, but cleft, angled, and pointed on inner margin. Three processes arise at apex of shaft and all extend horizontally; a short single process extends from the ventral side; the other two, each of which is branched at base,

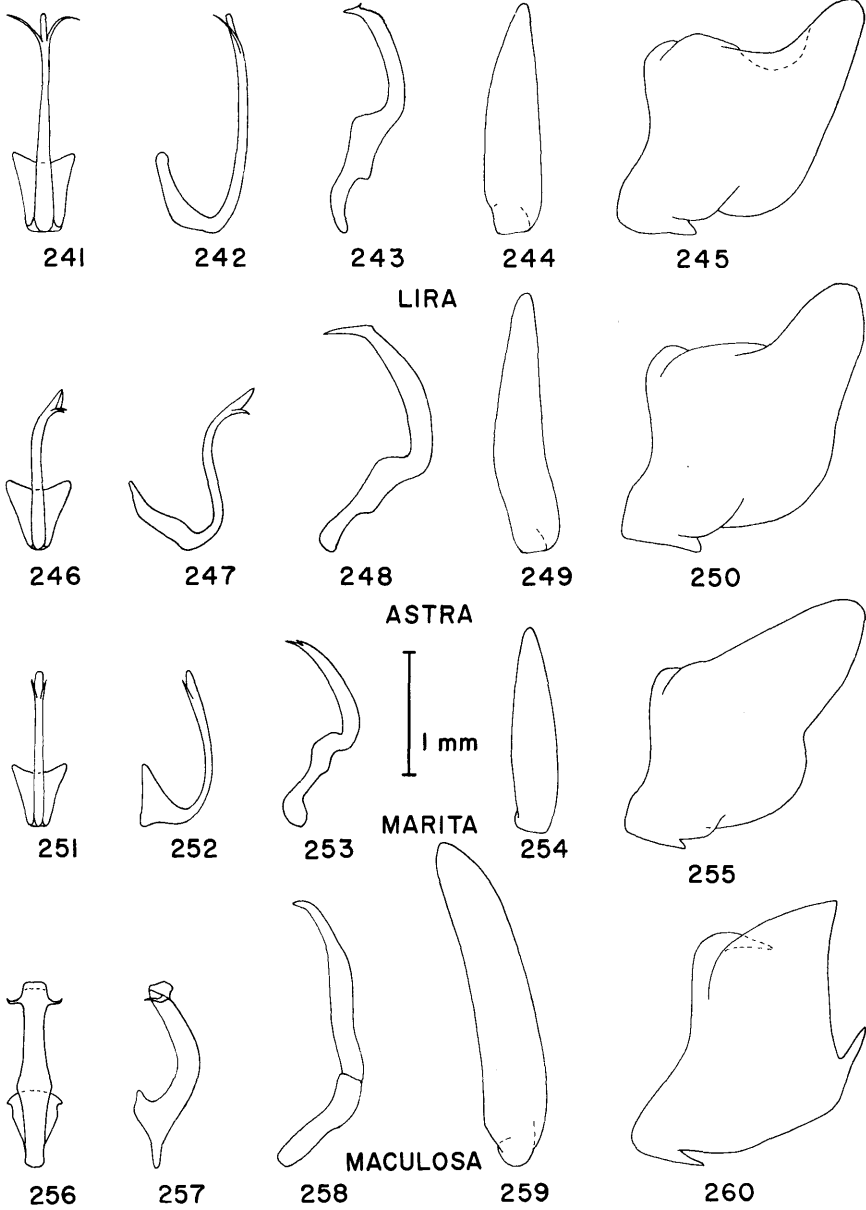


FIGURE 241-245. *Clinonaria lira*
 FIGURE 241. Ventral view of aedeagus
 FIGURE 242. Lateral view of aedeagus
 FIGURE 243. Lateroventral view of style
 FIGURE 244. Ventral view of plate
 FIGURE 245. Lateral view of pygofer
 FIGURE 246-250. *Clinonaria astra*
 FIGURE 246. Ventral view of aedeagus
 FIGURE 247. Lateral view of aedeagus
 FIGURE 248. Lateroventral view of style
 FIGURE 249. Ventral view of plate
 FIGURE 250. Lateral view of pygofer

FIGURE 251-255. *Clinonaria marita*
 FIGURE 251. Ventral view of aedeagus
 FIGURE 252. Lateral view of aedeagus
 FIGURE 253. Lateroventral view of style
 FIGURE 254. Ventral view of plate
 FIGURE 255. Lateral view of pygofer
 FIGURE 256-260. *Clinonaria maculosa*
 FIGURE 256. Ventral view of aedeagus
 FIGURE 257. Lateral view of aedeagus
 FIGURE 258. Lateroventral view of style
 FIGURE 259. Ventral view of plate
 FIGURE 260. Lateral view of pygofer

All drawn to the same scale.

arise on the dorsal side. Inner branches of each are longer and cross each other, extending dorsally; outer branches extend laterally. Pygofer with a stout process arising on each side from inner dorsal wall, and with the apex curved into genital chamber. The dorso-caudal surface is armed with large teeth.

Type.—Holotype male: Karlingdale, Matto Grosso, Porto Velho, Brazil, Sept. 3, 1943 Mark Taylor, in the North Carolina State University Collection.

***Clinonaria deseca* n. sp.**

(figs. 266–270)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, more than three times as broad between eyes at base as median length.

Coloration.—Crown pale brown, washed with yellow. Pronotum pale brown, with disc and posterior portion darker. Scutellum dark brown. Forewings dark brown, apices paler.

Male genitalia.—Plates about two and one-half times as long as wide; apices broad, rounded. Styles elongate, stout, tapered just before apices, which are flattened laterally, but each style appears enlarged at apex in ventral view. Aedeagus with two pairs of spines arising on apical portion of shaft. The longer pair arises laterally and preapically, extending laterally and basally about one-third the distance to base. The shorter pair arises apically, is almost as long as preapical pair, and extends laterally. Pygofer with a finger-like spine arising on dorso-caudal margin and extending along anal tube; a long, slender spine with a spear-like apex arises on inner dorsal wall and extends into genital chamber. Ventro-caudal margin is heavily chitinized and curled, appearing as a spine, and bears two chitinized spurs.

Type.—Holotype male: Chauchamayo, Peru, from W. F. H. Rosenberg, in the U. S. National Museum Collection.

***Clinonaria armata* n. sp.**

(figs. 271–275)

Length.—Male 13.5 mm.

Structure.—Crown broadly rounded, three times as broad between eyes at base as median length.

Coloration.—Crown and pronotum dark brown, with irregular paler markings. Pronotum with a diagonal paler stripe extending from humeral angle to median anterior margin. Scutellum and forewings dark brown.

Male genitalia.—Plates about four times as long as broad, apices bluntly pointed. Styles long and stout; apices bluntly pointed. Aedeagus broad, a pair of long, slender processes arising on ventral margin just before apex, which are about one-fourth the length of shaft and directed basally. A pair of longer, stouter spines arise apically, extend basally, curve laterally, and are more than one-third the length of shaft. Pygofer with a short, thick finger-like process which arises on dorso-caudal margin, and a long, slender process with an enlarged apex which arises on inner dorsal wall and extends into genital chamber. Ventro-caudal wall is heavily chitinized and bears two long, sharp spurs.

Type.—Holotype male: Huallaga R. Valley, tropical jungle 500 m.a.s.l. Huanuco, Peru, March 1954, F. L. Waytkowski, in the North Carolina State University Collection.

***Clinonaria diagonica* n. sp.**

(figs. 276–280)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, more than three times as wide between eyes at base as median length.

Coloration.—Crown brownish yellow. Pronotum brownish yellow; disc and posterior portion darker brown; a pale diagonal stripe extending from humeral angles to median anterior margin. Scutellum rusty brown, the apical angle paler. Forewings rusty brown.

Male genitalia.—Plates about four times as long as wide, apices bluntly pointed. Styles long and slender, apices pointed. Aedeagal shaft broad, widened at apex, with two pairs of

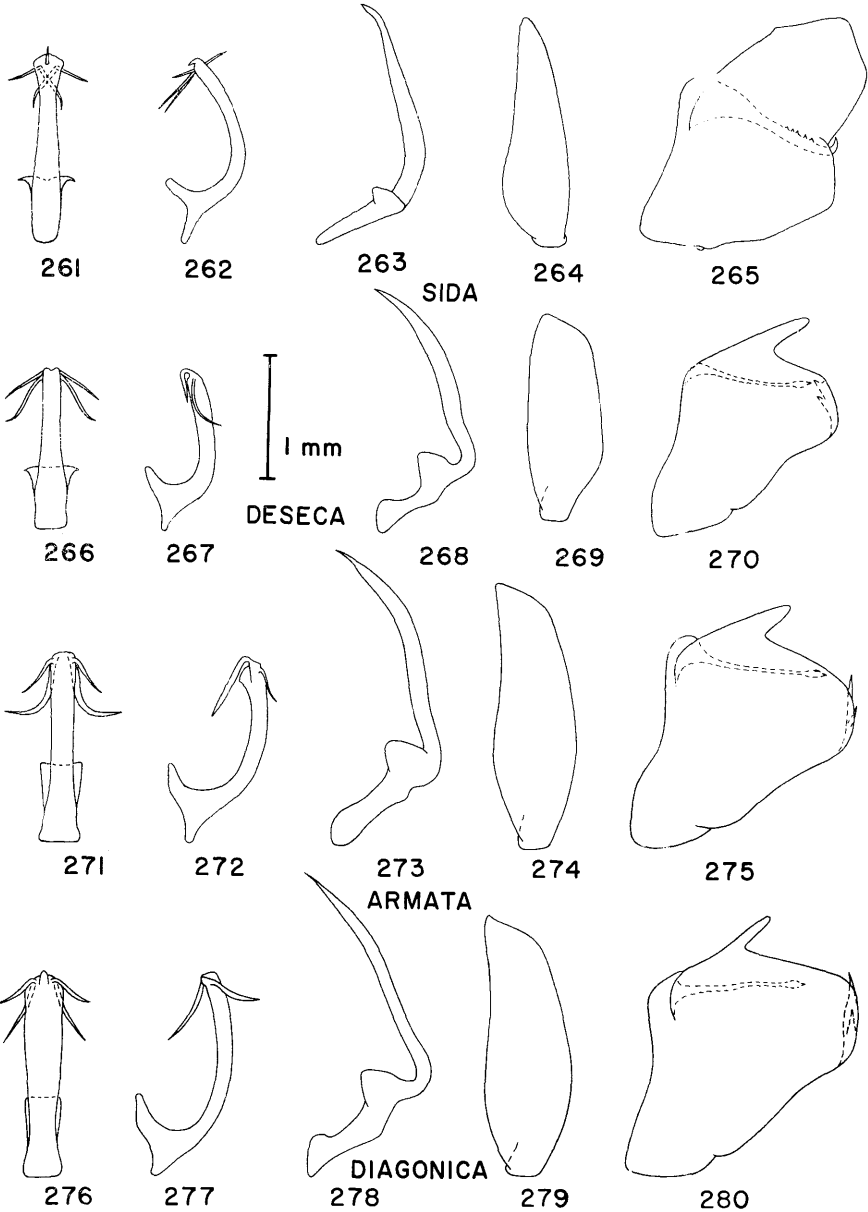


FIGURE 261-265. *Clinonaria sida*
 FIGURE 261. Ventral view of aedeagus
 FIGURE 262. Lateral view of aedeagus
 FIGURE 263. Lateroventral view of style
 FIGURE 264. Ventral view of plate
 FIGURE 265. Lateral view of pygofer
 FIGURE 266-270. *Clinonaria deseca*
 FIGURE 266. Ventral view of aedeagus
 FIGURE 267. Lateral view of aedeagus
 FIGURE 268. Lateroventral view of style
 FIGURE 269. Ventral view of plate
 FIGURE 270. Lateral view of pygofer

FIGURE 271-275. *Clinonaria armata*
 FIGURE 271. Ventral view of aedeagus
 FIGURE 272. Lateral view of aedeagus
 FIGURE 273. Lateroventral view of style
 FIGURE 274. Ventral view of plate
 FIGURE 275. Lateral view of pygofer
 FIGURE 276-280. *Clinonaria diagonica*
 FIGURE 276. Ventral view of aedeagus
 FIGURE 277. Lateral view of aedeagus
 FIGURE 278. Lateroventral view of style
 FIGURE 279. Ventral view of plate
 FIGURE 280. Lateral view of pygofer

All drawn to the same scale.

apical processes. One pair arises laterally on the ventral side, is about one-fourth as long as shaft, and extends laterally and ventrally. A more slender pair, about the same length, arises dorsally and extends laterally and basally. Pygofer with a short finger-like process on the dorso-caudal margin. A long, slender process with a spear-like apex arises on the inner dorsal wall and extends into genital chamber; ventro-caudal margin with two long, sharp-pointed spines.

Type.—Holotype male: N. E. Peru, S. A., XI-22-35, F. Waytkowski, A. C. Miller Collection, in The Ohio State University Collection.

***Clinonaria amputa* n. sp.**

(figs. 281-285)

Length.—Male 13.5 mm.

Structure.—Crown broadly rounded, almost three times as broad between eyes at base as median length.

Coloration.—Crown yellow, tinted with pale brown, and with a few brown flecks between ocelli. Pronotum dull yellow tinted with brown, with small black punctate spots and two larger black spots on disc, and several across posterior fourth. Scutellum dull yellow, basal angles darker. Forewings dull yellow mottled with pale brown, with two larger, dark brown spots on disc and a dark brown spot at end of each claval vein along commissure.

Male genitalia.—Plates short, about two and one-half times as long as broad; apices rounded, thickly clothed with long pubescence. Styles long, slender, tapered to pointed apices. Aedeagus slender at base, gradually broadened to enlarged apex, which is cleft at middle, forming a point on each side by sloping apical margin.

Type.—Holotype male: Hacienda Maria, Cusca, Peru, March 5, 1952, F. L. Waytkowski, along R. Cosnipata, tropical jungle, 900 m.a.s.l., in the North Carolina State University Collection.

***Clinonaria peruvella* n. sp.**

(figs. 286-290)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, about three times as wide between eyes at base as median length.

Coloration.—Crown brownish yellow, with numerous small black spots. Pronotum brownish yellow; small scattered brown spots on disc, and a transverse band of black spots just before posterior margin. Scutellum pale brown, basal angles darker. Forewings dull yellow, mottled with pale brown; darker brown spots along claval portion of commissure, along costal margin, and on apical portion.

Male genitalia.—Plates more than four times as long as wide, apices bluntly pointed. Styles with apical portions more slender, tapered to pointed apices. Aedeagus broad, with a pair of spines arising laterally at four-fifths the length of aedeagus and extending along shaft to apex. Spines are broad at base and taper to pointed apices. A pair of short, stout processes arise on dorsal surface of shaft before apex, which extend outward and curve apically, and extend close to shaft and to apex of other spines.

Types.—Holotype male: Huallago R. Valley, tropical jungle, 500 m.a.s.l., Huanuco, Peru, March 1954, F. L. Waytkowski. Paratypes: 2 males, same data as holotype. Holotype and one paratype in the North Carolina State University Collection; other paratype in the DeLong Collection.

***Clinonaria setosa* n. sp.**

(figs. 291-295)

Length.—Male 11 mm.

Structure.—Crown broadly rounded, almost three times as wide between eyes at base as median length.

Coloration.—Crown rusty brown, with thickly set, minute, dark brown punctate spots. Pronotum rusty brown with minute punctate spots, and with paler areas behind eyes and along humeral angles. Scutellum same color as pronotum. Forewings rusty brown, with a large

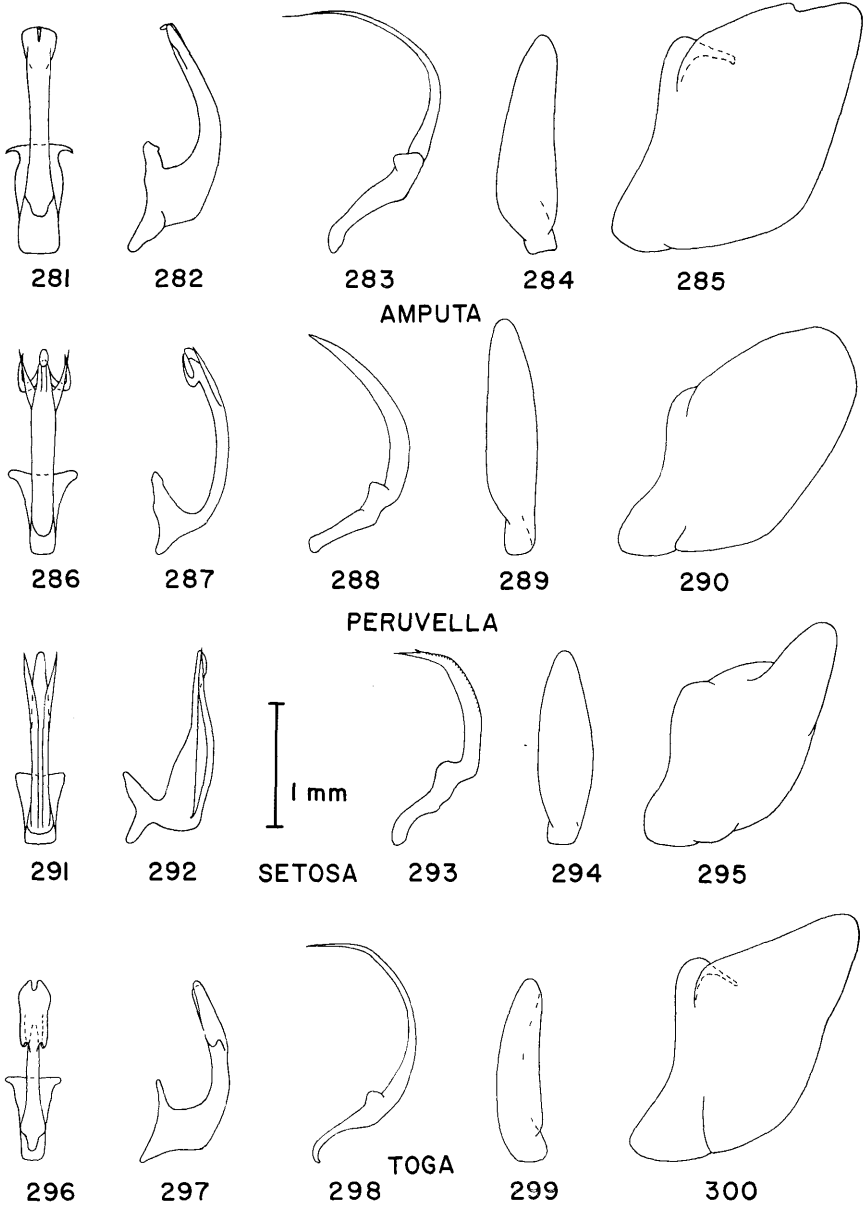


FIGURE 281-285. *Clinonaria amputa*
 FIGURE 281. Ventral view of aedeagus
 FIGURE 282. Lateral view of aedeagus
 FIGURE 283. Lateroventral view of style
 FIGURE 284. Ventral view of plate
 FIGURE 285. Lateral view of pygofer
 FIGURE 286-290. *Clinonaria peruvella*
 FIGURE 286. Ventral view of aedeagus
 FIGURE 287. Lateral view of aedeagus
 FIGURE 288. Lateroventral view of style
 FIGURE 289. Ventral view of plate
 FIGURE 290. Lateral view of pygofer

FIGURE 291-295. *Clinonaria setosa*
 FIGURE 291. Ventral view of aedeagus
 FIGURE 292. Lateral view of aedeagus
 FIGURE 293. Lateroventral view of style
 FIGURE 294. Ventral view of plate
 FIGURE 295. Lateral view of pygofer
 FIGURE 296-300. *Clinonaria toga*
 FIGURE 296. Ventral view of aedeagus
 FIGURE 297. Lateral view of aedeagus
 FIGURE 298. Lateroventral view of style
 FIGURE 299. Ventral view of plate
 FIGURE 300. Lateral view of pygofer

All drawn to the same scale.

white spot on disc and a few smaller white spots; a brown spot at terminus of each claval vein along commissure.

Male genitalia.—Plates about three times as long as broad; apices rounded. Styles long, stout, curved dorsally, and tapered to pointed apices. Aedeagal shaft long and slender, with slender apex. A pair of long, slender processes arise at base of shaft on ventral side and extend along shaft to apex.

Type.—Holotype male: Unt Amaz. Taperimbo b. Sntarem, 21-30-VI-27, Zerny, in the Vienna Museum.

***Clinonaria toga* n. sp.**

(figs. 296-300)

Length.—Male 13.5 mm.

Structure.—Crown broadly rounded, almost three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum brownish yellow, with numerous minute darker punctate spots. Two small brown spots on disc and a double, transverse row of brown spots just before posterior margin. Scutellum brownish yellow, basal angles darker. Forewings pale brown, a brown spot at end of each claval vein along commissure.

Male genitalia.—Plates about four times as long as wide, rounded at apices. Styles long, slender, tapered to more slender, pointed apices. Aedeagus with slender shaft, with a paired process fitted over the apical third. Process is narrow and rounded at apex, fitting closely against shaft, and is open and folded at base.

Type.—Holotype male: Iquitos, Peru, IV-15, in the DeLong Collection.

***Clinonaria vulgata* n. sp.**

(figs. 301-305, 365)

Length.—Male 11.3 mm. Female 14 mm.

Structure.—Crown broadly rounded, more than twice as wide between eyes at base as median length.

Coloration.—Crown brownish yellow. Pronotum brownish yellow, with numerous irregular markings; a series of vermiculate markings just back of crown on pronotum and a median transverse band of brownish spots; posterior third darker brown. Scutellum yellow with darker basal angles. Forewings brownish subhyaline, veins prominent.

Male genitalia.—Plates about three and one-half times as long as wide; apices rounded. Styles with apical half broadened, twisted, and sickle-shaped, with slender apices. Aedeagus with apical half broad, narrowed at apex. A thin sheath-like cap arises at apex and extends basally over shaft on ventral side. On dorsal side, two short, broad spines are produced, which extend laterally. Pygofer with a long, slender, lateral process on each side, arising on ventral margin near base of style and extending to tip of plate.

Female genitalia.—Seventh sternum with produced lateral angles broadly rounded to posterior margin, which is broadly, concavely excavated on middle half more than one-third the distance to base, and with a small shallow notch at apex of excavation.

Types.—Holotype male: Darien Prov., Santa Fe, Panama, VI-2-67, DeLong and Triplehorn. Allotype female: Same data. Paratypes: 1 male, Barro Colo. I., C. Z., V-24-40, Jas. Zetek, No. 4656; 2 females, same except V-41, 41-11389 at light; 1 female, same, Apr., 1941; 2 males and 1 female, Barro Colo. I., C. Z., V-7-37, S. W. Frost; 1 female, same except IV-14-37; 1 male, same except Apr. 1946; 2 males and 1 female, Porta Bello, Pan., 21-4-12, A. Busck Coll.; 1 male, Trinidad Riv., Panama, May 2-11, August Busck; 1 male, Pan., Barro Colo., 10-17, V-64, W. O. and S. S. Duckworth; 1 male, Panama, El Retiro, 10-XI-1952; 1 male, Barro Colo., C. Z., 5-29-10, Jas. Zetek; 1 male, Cabina, Pan., May 5-11, August Busck; 1 female, Mojinga Swp., 15-1-53, Coll. F. S. Blanton; 1 male, Panama, La Jolka, 26-IV-51, F. S. Blanton Coll.; 1 male, same as holotype except IX-X-40; 1 female, Trinidad Rio, Pan., 16-3-12, A. Busck; 1 female, Panama; 2 females, Panama, Barro Colo. I., 28-30, IV-64, W. D. and S. S. Duckworth; 1 female, Barro Colo., Gatun Lake, Pan., July 1923, R. C. Shannon; 1 female, Pan., P. R. Uhler Coll.; 1 male, Rio Gatun, Port Limon, C. Z. IV-21-44, K. E. Frick Coll.; 2 females, Ft. Clayton, C. Z.,

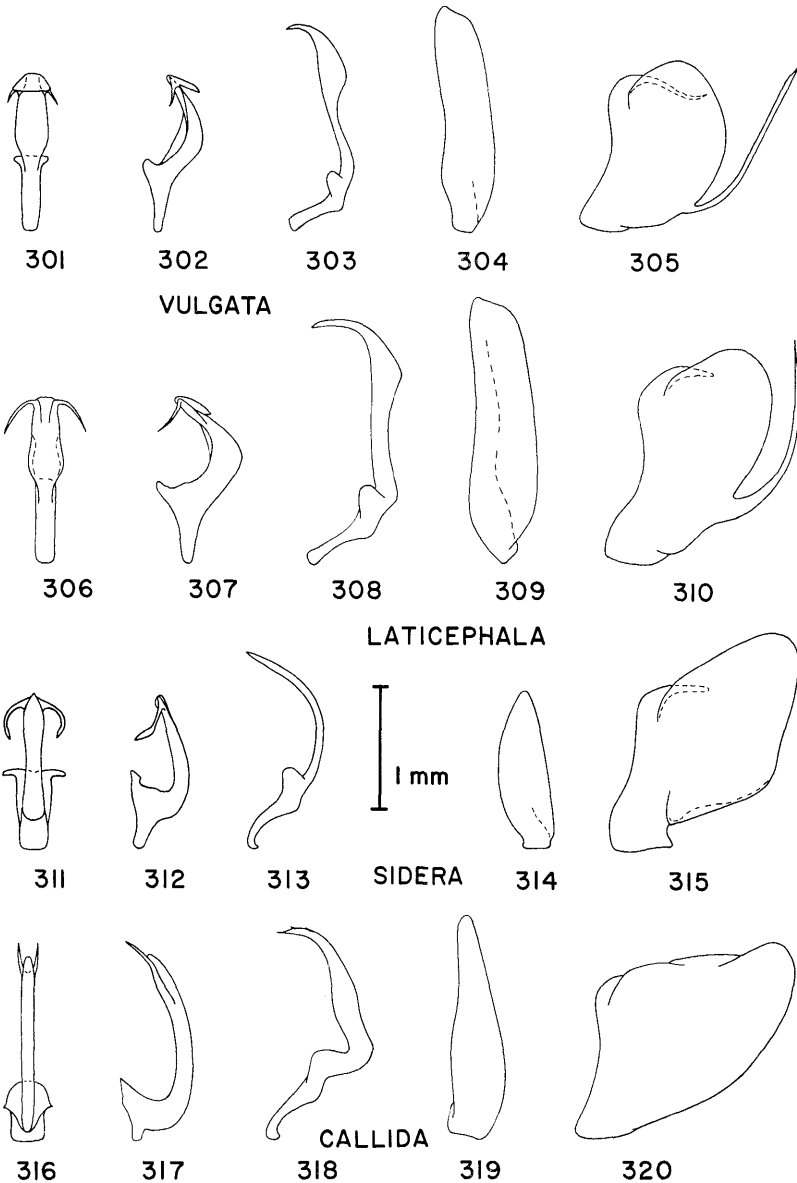


FIGURE 301-305. *Clinonaria vulgata*
 FIGURE 301. Ventral view of aedeagus
 FIGURE 302. Lateral view of aedeagus
 FIGURE 303. Lateroventral view of style
 FIGURE 304. Ventral view of plate
 FIGURE 305. Lateral view of pygofer

FIGURE 306-310. *Clinonaria laticephala*
 FIGURE 306. Ventral view of aedeagus
 FIGURE 307. Lateral view of aedeagus
 FIGURE 308. Lateroventral view of style
 FIGURE 309. Ventral view of plate
 FIGURE 310. Lateral view of pygofer

FIGURE 311-315. *Clinonaria sidera*
 FIGURE 311. Ventral view of aedeagus
 FIGURE 312. Lateral view of aedeagus
 FIGURE 313. Lateroventral view of style
 FIGURE 314. Ventral view of plate
 FIGURE 315. Lateral view of pygofer

FIGURE 316-320. *Clinonaria callida*
 FIGURE 316. Ventral view of aedeagus
 FIGURE 317. Lateral view of aedeagus
 FIGURE 318. Lateroventral view of style
 FIGURE 319. Ventral view of plate
 FIGURE 320. Lateral view of pygofer

All drawn to the same scale.

V-44, K. E. Frick Coll.; 1 female, Porto Bello, Panama, 6 mi. East, II Plantation, II-17-30, T. O. Zschokka Collector; 1 male and 2 females, F. 330304L, 330201LL, 330228LL, Barro Colorado, C. Z., III-23; 1 female, Barro Colorado, C. Z., 6-II-36, collected by Gertsen, Lutz, Wood. Holotype, allotype, and paratypes in the DeLong Collection. Paratypes in the U. S. National Museum, the Stockholm Museum, the North Carolina State University, and the American Museum of Natural History Collections.

Clinonaria laticephal n. sp.

(figs. 306-310)

Length.—Male 13.5 mm.

Structure.—Crown broadly rounded, about twice as wide between eyes at base as median length.

Coloration.—Crown brownish yellow anteriorly, dull greenish on basal portion. Pronotum brownish yellow, with darker irregular markings on anterior half, posterior margin broadly bordered with darker brown. Scutellum dark brown. Forewings brownish subhyaline; veins brown, prominent.

Male genitalia.—Plates about four times as long as wide, apices rounded. Styles broad, widened at two-thirds their length by a lobe on ventral margin, then narrowed and curved dorsally, forming bluntly pointed apices. Aedeagus broadened apically with a pair of stout, horn-like processes arising laterally and extending laterally and curved dorsally. Pygofer with a pair of long, slender processes, thickened at base, arising on ventral margin near styles and extending to length of plates.

Types.—Holotype male: Napa R., Peru, VII-1919. Paratypes: 1 male, same as holotype except VI-12; 1 male, Upper Rio Maranon, Peru, IX-20-24, F-6024. Holotype and one paratype in the DeLong Collection; other paratype in the American Museum of Natural History Collection.

Clinonaria sidera n. sp.

(figs. 311-315)

Length.—Male 10.5 mm.

Structure.—Crown broadly rounded, almost three times as broad between eyes at base as median length.

Coloration.—Crown pale brown with numerous minute, black punctate spots. Pronotum pale brown; punctate spots larger and well distributed. Scutellum pale brown, basal angles darker. Forewings pale brown, mottled with brown.

Male genitalia.—Plates short, about two and one-half times as long as broad. Styles long, stout, tapered to pointed apices. Aedeagus narrowed at middle, widened on apical fourth, with a pair of long, stout processes arising laterally at apex, which curve laterally, then dorsally, and are flattened, broadened, and spear-like at apex.

Types.—Holotype male: Mojinga Swamp, Ft. Sherman, C. Z., 15-XI-1951, F. S. Blanton collector. Paratype: 1 male, Barro Colorado, C. Z., III-7-1933, F. 330307LL. Holotype in the U. S. National Museum Collection, paratype in the American Museum of Natural History Collection.

Clinonaria callida n. sp.

(figs. 316-320)

Length.—Male 12.5 mm.

Structure.—Crown broadly rounded, short, four times as wide between eyes at base as median length.

Coloration.—Crown, pronotum, and scutellum pale brown, with darker brown, minute, punctate spots. Forewings dull, pale brown, with paler irregular mottling.

Male genitalia.—Plates about five times as long as wide; apices bluntly pointed. Styles bluntly pointed. Styles stout, curved dorsally at apices, and pointed. Aedeagus slightly broadened apically, where two apical terminal processes arise, which are one-sixth the length of shaft, from a continuation of the shaft, and are widely separated, slender, and pointed.

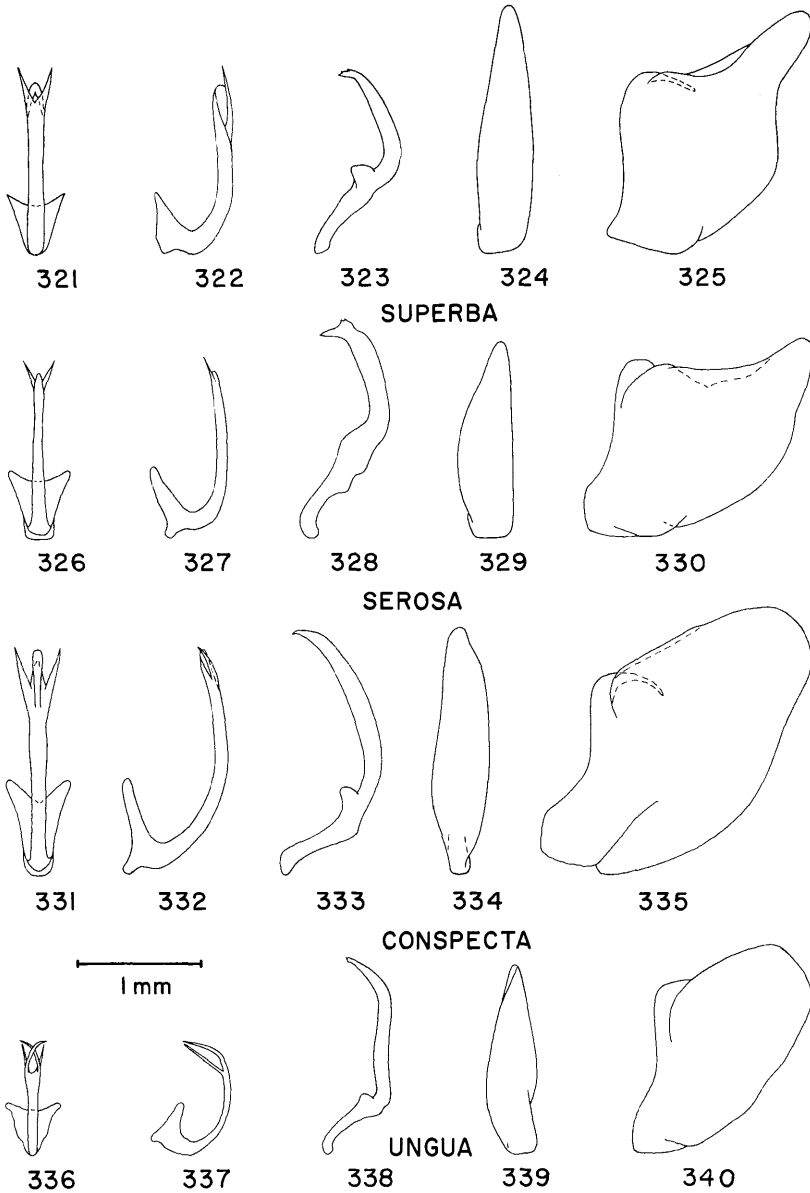


FIGURE 321-325. *Clinonaria superba*
 FIGURE 321. Ventral view of aedeagus
 FIGURE 322. Lateral view of aedeagus
 FIGURE 323. Lateroventral view of style
 FIGURE 324. Ventral view of plate
 FIGURE 325. Lateral view of pygofer
 FIGURE 326-330. *Clinonaria serosa*
 FIGURE 326. Ventral view of aedeagus
 FIGURE 327. Lateral view of aedeagus
 FIGURE 328. Lateroventral view of style
 FIGURE 329. Ventral view of plate
 FIGURE 330. Lateral view of pygofer

FIGURE 331-335. *Clinonaria conspecta*
 FIGURE 331. Ventral view of aedeagus
 FIGURE 332. Lateral view of aedeagus
 FIGURE 333. Lateroventral view of style
 FIGURE 334. Ventral view of plate
 FIGURE 335. Lateral view of pygofer
 FIGURE 336-340. *Clinonaria unguata*
 FIGURE 336. Ventral view of aedeagus
 FIGURE 337. Lateral view of aedeagus
 FIGURE 338. Lateroventral view of style
 FIGURE 339. Ventral view of plate
 FIGURE 340. Lateral view of pygofer

All drawn to the same scale.

Types.—Holotype male: Chapada, Brazil, April, Collector C. F. Baker. Paratypes: 2 males, same as holotype except June; 1 male, Chapada, Brazil, Aug., Acc. 2966. Holotype and paratype in the U. S. National Museum Collection; paratypes also in the Carnegie Museum and the DeLong Collections.

***Clinonaria superba* n. sp.**

(figs. 321–325)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, about three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum pale brown, heavily marked with minute brown punctate spots. Scutellum brown, the basal angles darker. Forewings pale, dull brown, darker anteriorly, with a few white spots.

Male genitalia.—Plates about five times as long as wide; apices narrow, blunt, Styles short, stout, with teeth on blunt apex. Aedeagus stout, with a pair of processes, with broad triangular apices arising on ventral surface at about half the length of shaft. Shaft with a blunt apex.

Type.—Holotype male: Napo R., Peru, VII-20, in the DeLong Collection.

***Clinonaria serosa* n. sp.**

(figs. 326–330, 356)

Length.—Male 12.5 mm. Female 13 mm.

Structure.—Crown broadly rounded, about three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum pale brown, heavily marked with minute, dark brown, punctate spots. Scutellum pale brown; basal angles darker. Forewings pale brown, sparsely mottled with white.

Male genitalia.—Plates about three times as long as wide; apices rounded. Styles in ventral view broad, curved dorsally, and tapered to pointed apices; a small protrusion of two teeth on outer margin of each, near its apex. Aedeagus slender, branched near apex to produce two terminal, slender spines, which are one-sixth the length of shaft, tapered and pointed, and extend far beyond the short portion of the shaft between them.

Female genitalia.—Seventh sternum with lateral angles well produced and rounded; posterior margin broadly, deeply excavated almost half-way to base on middle two-thirds, with a broad, slightly produced lobe at base; lobe is one-fourth the width of segment and is broadly excavated at middle to depth of segment excavation, thus producing two wide, separated, bluntly pointed, sunken teeth.

Types.—Holotype male: P. del Sara, Bolovia, Oct. 1913 Steinbach Acc. 5064. Allotype female: Same data as male. Holotype and allotype in the Carnegie Museum Collection.

***Clinonaria conspecta* n. sp.**

(figs. 331–335)

Length.—Male 13 mm.

Structure.—Crown broadly rounded, almost three times as wide between eyes at base as median length.

Coloration.—Crown and pronotum pale brown, irregularly marked with dark brown, minute, punctate spots; a concentration of dark color pigment just before posterior margin of pronotum. Scutellum with anterior half dark brown, posterior portion brownish yellow. Forewings pale brownish mottled with darker brown.

Male genitalia.—Plates about four and one-half times as long as wide; apices rounded. Styles long, narrowed on apical portion and pointed. Aedeagus stout, a pair of stout processes arising on lateral margins at more than two-thirds the length of shaft and extending beyond the apex.

Types.—Holotype male: Peru: Monson Valley, Tingo Maria, XII-18-1954, E. I. Schlinger and E. S. Ross collectors. Paratype: 1 male, Peru: Yurac, 67 mi. E. of Tingo Maria, XI-16-1954, E. I. Schlinger and E. S. Ross, collectors. Holotype and paratype in the California Academy of Science Collection.

***Clinonaria unguia* n. sp.**
(figs. 336-340)

Length.—Male 11.5 mm.

Structure.—Crown broadly rounded, almost three times as wide between eyes at base as median length.

Coloration.—Crown pale brown. Pronotum pale brown, the disc and posterior portion with dark brown pitted markings. Scutellum pale brown. Forewings pale brown, mottled with darker brown.

Male genitalia.—Plates about four times as long as wide; apices bluntly pointed. Styles in lateral view short, broad, curved, and tapered at apices to pointed tips. Aedeagus long and slender, ventral portion forming two long, slender processes, and two other processes arising from dorsal portion. These four processes form the terminal third of the shaft and extend to about the same length.

Type.—Holotype male: Roches de Kouron, Guyane, France Collection le Moutl Coll 1, in the North Carolina State University Collection.

***Clinonaria conspicua* n. sp.**
(figs. 341-345)

Length.—Male 11.5 mm.

Structure.—Crown broadly rounded, about three times as broad between eyes at base as median length.

Coloration.—Crown, pronotum, and scutellum brown, heavily marked with dark brown, minute, punctate spots. Forewings pale brown with a few white marks.

Male genitalia.—Plates about four times as long as broad; apices narrow, rounded. Styles in lateral view broad, short; apical portion curved dorsally, narrowed, and pointed, with conspicuous teeth on ventral margin near apices. Aedeagus long, slender, with a pair of short processes arising on ventral surface at five-sixths the length of shaft and not extending to apex.

Type.—Holotype male: Escola Sup de Agr., Peru, F. 544, in the DeLong Collection.

***Clinonaria setigera* n. sp.**
(figs. 346-350)

Length.—Male 12 mm.

Structure.—Crown broadly rounded, about three times as wide between eyes at middle as median length.

Coloration.—Crown, pronotum, and scutellum pale brown, set with numerous dark brown, punctate spots, often connected. Apical half of scutellum paler. Forewings dull pale brown mottled with white.

Male genitalia.—Plates about five times as long as broad; apices rounded. Styles, in lateral view, rather broad, concavely narrowed on upper margins at apices to form pointed tips. Aedeagus slightly broadened on apical half; ventral portion of shaft forming two long, slender, proximal processes at about half the length of shaft, which extend along shaft to apex, where the dorsal portion terminates in two similar, slender processes.

Type.—Holotype male: Manaus, Brazil, XI-19, in the DeLong Collection.

Clinonaria marmorata (Spangberg)
(figs. 351-355)

Gypona marmorata Spangberg, 1878, p. 59

Length.—Male 13 mm.

Structure.—Crown broad, only slightly produced at middle, more than twice as broad between eyes at base as median length.

Coloration.—Brown with darker brown spots. Anterior margin of crown smoky brown. Pronotum with irregular brown markings across anterior portion; disc with small punctate spots, posterior margin a little darker. Scutellum with darker basal angles and a white spot at middle. Forewings with dark veins and irregular paler areas between them.

Male genitalia.—Plates elongate, one and one-half times as long as combined basal width; inner margins curved outwardly to form bluntly pointed apices. Styles narrow on basal two-thirds, narrow at base, then rather rapidly enlarged on ventral margin to form an apical third which is gradually narrowed to form dorsally bent, sharp-pointed apices. Aedeagus in ventral view narrow on basal half, then broadened to near apex where it is again narrowed and bears a pair of lateral processes which extend laterally and basally. Shaft is slightly broadened and truncate at apex. In lateral view, aedeagus is broad on basal half, then gradually narrowed to the lateral processes, with apex of shaft slender. Pygofer with a long, slender spine arising ventrally near base and extending caudally below the pygofer to apex, where it curves dorsally.

Type.—Holotype male from Bogota, Colombia, in the Stockholm Museum Collection.

Notes.—Two male specimens in the type series represent the known material of this species.

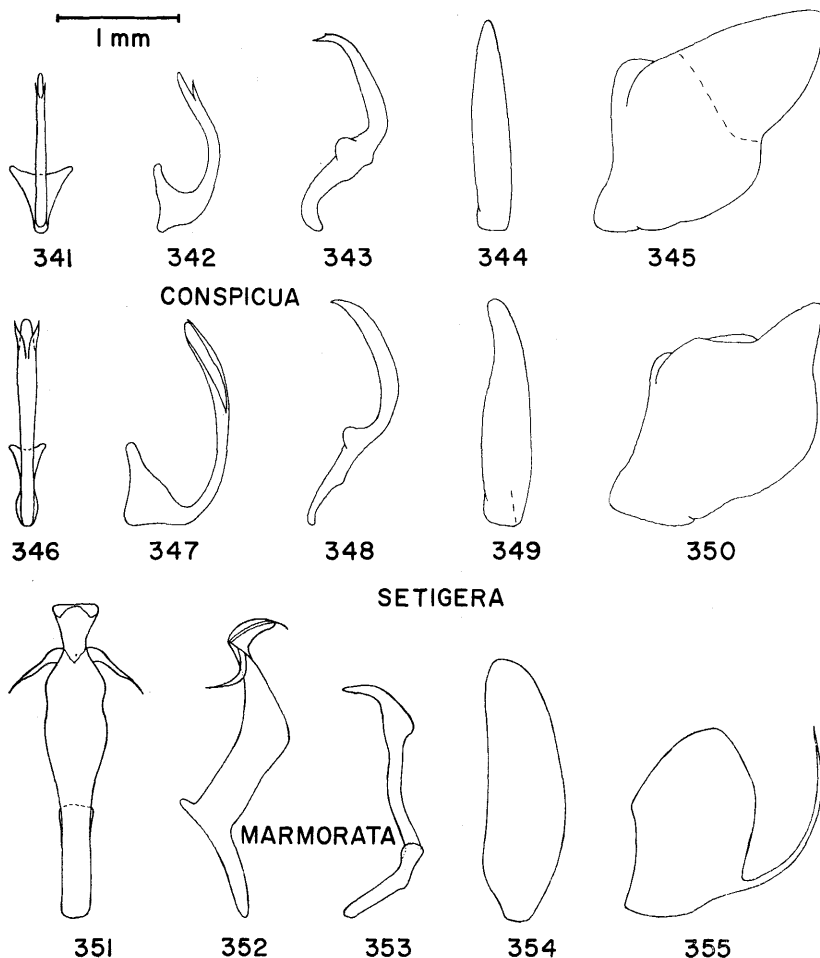


FIGURE 341-345. *Clinonaria conspicua*
 FIGURE 341. Ventral view of aedeagus
 FIGURE 342. Lateral view of aedeagus
 FIGURE 343. Lateroventral view of style
 FIGURE 344. Ventral view of plate
 FIGURE 345. Lateral view of pygofer
 FIGURE 346-350. *Clinonaria setigera*
 FIGURE 346. Ventral view of aedeagus
 FIGURE 347. Lateral view of aedeagus

FIGURE 348. Lateroventral view of style
 FIGURE 349. Ventral view of plate
 FIGURE 350. Lateral view of pygofer
 FIGURE 351-355. *Clinonaria marmorata*
 FIGURE 351. Ventral view of aedeagus
 FIGURE 352. Lateral view of aedeagus
 FIGURE 353. Lateroventral view of style
 FIGURE 354. Ventral view of plate
 FIGURE 355. Lateral view of pygofer

Figures 341 to 350 drawn to the same scale.

Clinonaria picea (Walker)
(fig. 357)

Scaris picea Walker, 1851, p. 832

Length.—Female 14 mm.

Structure.—Crown short and broad, scarcely produced, more than three times as wide between eyes as median length. Pronotum much broader than head. Head rounded to front. Ocelli widely separated, much closer to eyes than to median line.

Coloration.—Crown and pronotum reddish-brown, with dark brown punctures. Forewings dull brown, washed with red, with a small median white patch.

Female genitalia.—Seventh sternum with produced, blunt, lateral angles, between which the posterior margin is broadly, shallowly excavated, with a slight U-shaped notch at middle.

Type.—Holotype female from Brazil, in the British Museum of Natural History collection.

Notes.—The type is the only specimen of this species observed.

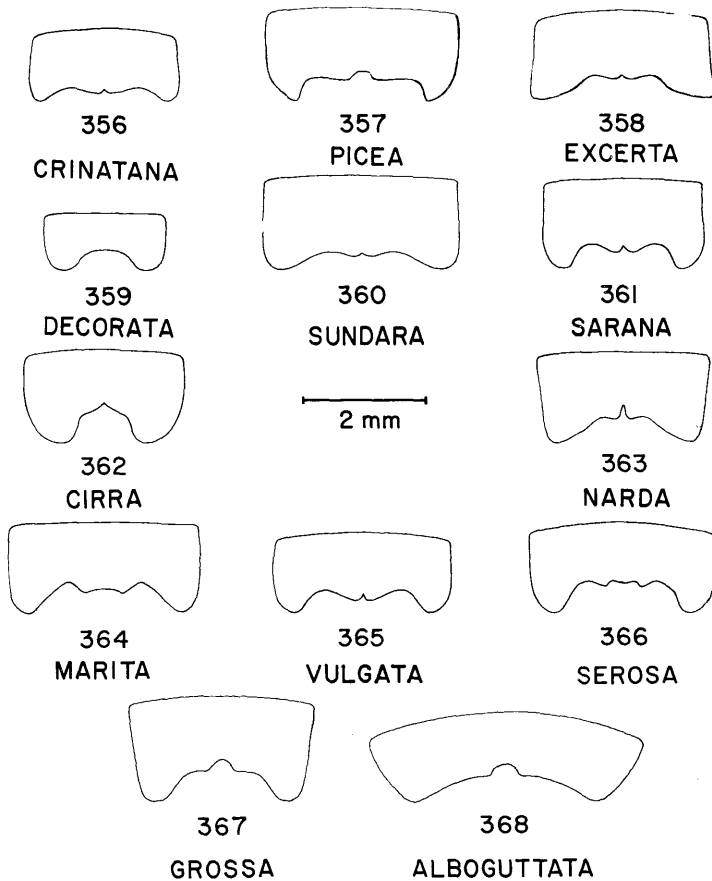


FIGURE 356-368. Female seventh sterna

- FIGURE 356. *Clinonaria crinatana*
- FIGURE 357. *Clinonaria picea*
- FIGURE 358. *Clinonaria excerta*
- FIGURE 359. *Clinonaria decorata*
- FIGURE 360. *Clinonaria sundara*
- FIGURE 361. *Clinonaria sarana*
- FIGURE 362. *Clinonaria cirra*

- FIGURE 363. *Clinonaria narda*
 - FIGURE 364. *Clinonaria marita*
 - FIGURE 365. *Clinonaria vulgata*
 - FIGURE 366. *Clinonaria serosa*
 - FIGURE 367. *Clinonaria grossa*
 - FIGURE 368. *Clinonaria alboguttata*
- Figures 356 to 366 drawn to the same scale.

Clinonaria grossa (Osborn)
(fig. 367)

Ponana grossa Osborn, 1938, p. 42

Length.—Female 14 mm.

Structure.—Crown broadly rounded, more than twice as wide between eyes at base as median length.

Coloration.—Crown and scutellum brown, unmarked, Pronotum pale brown, with darker irregular markings and punctate spots. Forewings brown, veins brown; some small white spots across anterior portion from costa to clavus.

Female genitalia.—Seventh sternum with lateral angles broadly, roundedly produced, between which median half of posterior margin is broadly excavated one-third the distance to base, with a median, broad, V-shaped notch at apex.

Type.—Holotype female from Brazil, in the Carnegie Museum Collection.

Notes.—Three females are known, one each from Brazil, Bolivia, and French Guiana.

Clinonaria alboguttata (Spangberg)
(fig. 368)

Gypona alboguttata Spangberg, 1878, p. 58

Length.—Female 14 mm.

Structure.—Crown broad, scarcely produced, more than twice as broad between eyes at base as median length.

Coloration.—Pale brown; crown and pronotum with darker brown punctate spots which appear transverse in pattern. Forewings brown, with paler spots between brown veins; a quadrate, white spot on disc of each wing and a few smaller irregular white spots.

Female genitalia.—Seventh sternum with posterior margin gradually sloping cephalad from the lateral angles to a median, shallow, U-shaped excavation.

Type.—Holotype female from Brazil, in the Stockholm Museum Collection.

Notes.—This species is known from two female types.

LITERATURE CITED

- DeLong, D. M. and P. H. Freytag.** 1962. Studies of the Gyponini (Homoptera: Cicadellidae): The *Gypona glauca* (Fabricius) complex. Bull. Brooklyn Entomol. Soc. 57(4): 109-131; 36 figs.
- . 1964. Four Genera of the World Gyponinae; A synopsis of the genera *Gypona*, *Gyponana*, *Rugosana*, and *Reticana*. Bull. Ohio Biol. Survey II—new series (3): 227 pp; 372 figs.
- Fowler, W. W.** 1903. Order Rhynchota, Suborder Hemiptera-Homoptera (continued), Biologia Centrali Americana 2: 293-316, pls 20-21.
- Freytag, P. H. and D. M. DeLong.** 1968. Corrective note on *Gypona decorata* Fowler. Ohio J. Sci. 68(5): 333.
- Metcalf, Z. P.** 1949. Tettigellidae and Gyponidae (Homoptera) of Kartabo, Bartica District, British Guiana. Zoologica 34: 277.
- . 1962. General Catalogue of the Homoptera. Part 3, Gyponinae. Agr. Res. Ser. U. S. Dept. Agr. 1-229.
- Osborn, H.** 1938. Art. II Neotropical Homoptera of the Carnegie Museum Part 7. Report on the species of the subfamily Gyponinae. Ann. Carnegie Museum 27: 11-62, 5 pls.
- Spangberg, J.** 1878. Species Gyponae, generis Homopterorum. Bihang, Kongl. Svenska Vet. Akad. Handl. 5(3): 5-76.
- Walker, F.** 1851. List of the specimens of Homopterous Insects in the collection of the British Museum. 2: 261-636, pls. 3-4.