

Studies on Neotropical leafhoppers (Homoptera: Cicadellidae)

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DeLong, D. M. & Linnavuori, R. E.: Studies on Neotropical leafhoppers (Homoptera: Cicadellidae). Ent. scand. 9:111-123. Lund, Sweden 1 July 1978. ISSN 0013-8711.

The following 17 new Neotropical Cicadellidae species are described: *Portanus inflatus* n. sp. (Peru), *Egenus triplehorni* n. sp. (Brazil), *E. gracillimus* n. sp. (Brazil), *Scaphytopius lineus* n. sp. (Peru), *S. spinosus* n. sp. (Peru), *S. atrifrons* n. sp. (Peru), *S. divisus* n. sp. (Peru), *S. bifidellus* n. sp. (Peru), *Agudus strigilifer* n. sp. (Brazil), *A. amabilis* n. sp. (Argentina), *Paraphlepsius orthana* n. sp. (Bolivia), *Chlorotettix bimaculatus* n. sp. (Brazil), *C. sinchona* n. sp. (Peru), *C. hastulus* n. sp. (Brazil), *C. frameus* n. sp. (Brazil), *C. torqua* n. sp. (Brazil) and *Stirellus obrienorum* n. sp. (Brazil). *Scaphoideus tessellatus* Osb. (Guatemala) is transferred into the genus *Portanus* Ball and *Dicyphonia picturata* Osb. (Bolivia) into the genus *Scaphytopius* Ball.

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Xestocephalinae

1. *Portanus tessellatus* (Osborn), 1909, n. comb. (Figs 1, 5)

Scaphoideus tessellatus Osborn, 1909:465

Length 5 mm (fig. 1). Resembling *P. perlaticeps* Lv. (Costa Rica) (Linnavuori 1959:47-48) in the size, color pattern of the crown and shape of the 7th sternite (♀) (fig. 5) but differing in the paler reddish brown general coloring: Under surface yellowish brown, upper margin of frontoclypeus with narrow transverse pale band. Anterior part of crown black with 6 marginal spots and two middle spots at apex of coronal suture pale; rest of disk brown with margins and minute irroration pale. Pronotum brown with dense pale mottling. Scutellum fulvous, margins narrowly whitish, basal triangles brown. Elytra hyaline reddish brown with a few milky and brown spots; veins dark brown with dense whitish spotting, apical veins immaculate, dark. Crown 1.7 × as long at middle as laterally, as long as broad.

Material studied: holotype: ♀, Guatemala: Los Amates, 18-28.VII.1909. Leg. J. S. Hine. In coll. Osborn, Ohio State University.

2. *Portanus inflatus* n. sp. (Figs 6-10)

Type area: Peru, Sinchona.

Type material: *Holotype*: ♂, Peru: Sinchona, November 1943. Leg. J. G. Sanders. In coll. DeLong.

- *Allotype*: ♀, same data as holotype. In coll. DeLong.
- *Paratypes*: 2 ♂, 2 ♀, same data as holotype. In coll. DeLong.

Diagnosis: Superficially *P. inflatus* appears similar to *P. lex* with the same type of coloration but it is larger and has distinct male genitalia as illustrated (figs 6-10).

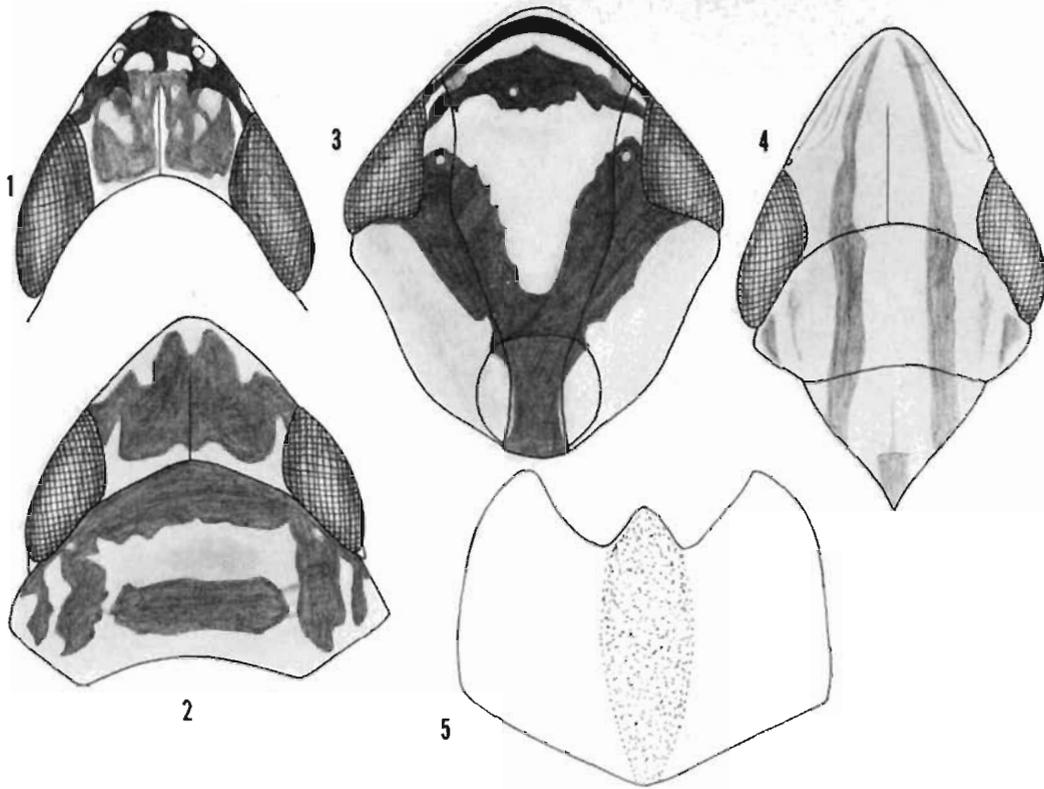
Description

Length of male 6 mm., female 7.5 mm.

Crown bluntly angled. Color, apex of crown dark brown with two proximal white spots, disc with pale brown mottling. Pronotum brown with numerous small white spots. Forewings subhyaline, veins, except apical vein, and costal margin with alternating brown and white coloration.

Male genitalia (figs 6-10) with plates more than four times as long as basal width, apical two thirds slender, apical portion curved outwardly, apex rounded. Style long and slender with a spur on inner margin at onethird its length, and a narrow curved loop at two thirds length of style. Aedeagus in lateral view appearing broad, broadly rounded at apex; median two thirds composed of a pair of broad leaflike plates, diverging anteriorly, base of aedeagus slender. A conspicuous spine extends basad at posterior ventral margin of the curved apical portion. Pygofer with a heavily sclerotized strip on posterior margin, each side, bearing a terminal dorsocaudal spine.

Female seventh sternum with posterior margin slightly, concavely rounded.



Figs 1-5. - 1, 5. *Portanus tessellatus* (Osb.). - 1. Head. - 5. 7th sternite (?). - 2-3. *Scaphytopius picturatus* (Osb.). - 2. Head and pronotum. - 3. Face. - 4. *Agudus amabilis* n. sp., head and pronotum.

Deltocephaline

3. *Egenus triplehorni* n. sp. (Fig. 16)

Type area: Brazil, Piracicaba, Sao Paulo.

Type material: *Holotype*: ♀, Brazil: Piracicaba, Sao Paulo, 14.XI.1965. Leg. C. A. Triplehorn. In coll. DeLong. - *Paratype*: ♂, same data as holotype. In coll. DeLong.

Diagnosis: The two previously known species of the genus, *E. acuminatus* Om. (Argentina, Paraguay) and *E. breviceps* Lv. (Brazil) (descriptions in Linnavuori 1957:139-140), differ in the roundedly parabolic crown.

Description

Length 7.75-8.0 mm (fig. 16). Uniformly pale ochraceous. Eyes greyish.

Resembling the following species but is much more robust and with the crown shorter and broader, 2.35-2.50 × as long at middle as lateral-

ly, slightly shorter than long (40:42), 1.8 × as long as median length of pronotum, sharply parabolic. 7th sternite (♀) as in the following species.

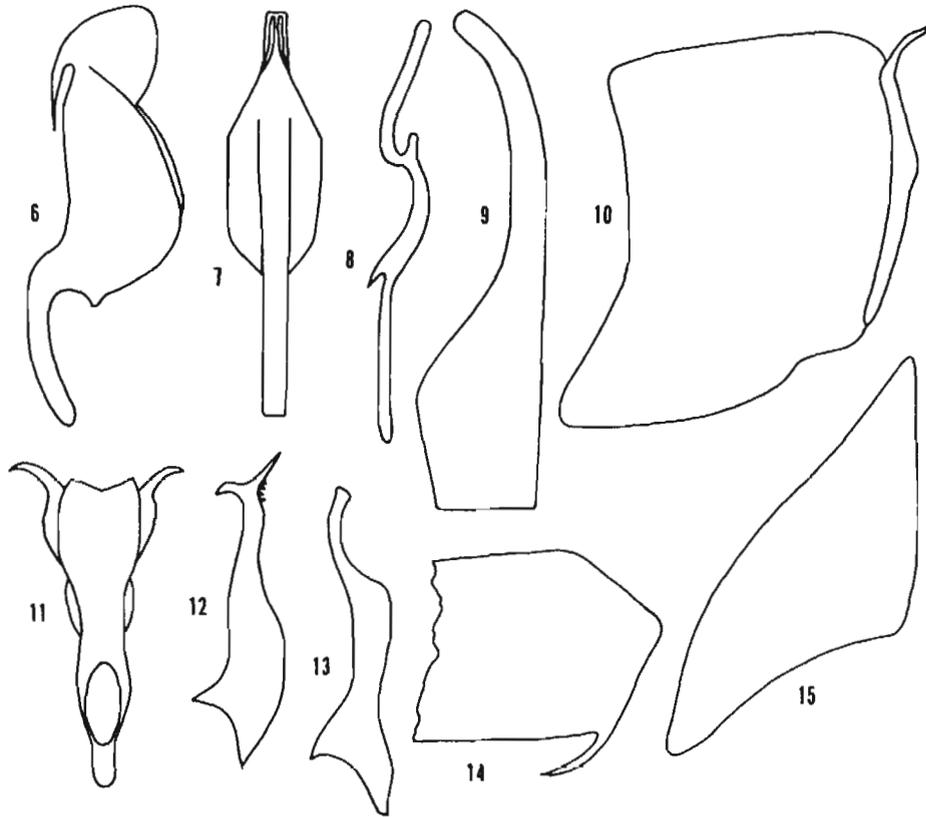
The species is dedicated to Prof. Charles A. Triplehorn, curator of insect collections in The Ohio State University.

4. *E. gracillimus* n. sp. (Figs 17-19)

Type area: Brazil, Parana, Vile Velha.

Type material: *Holotype*: ♂, Brazil: Parana, Vile Velha, 12.I.1969. Leg. L. & C. W. O'Brien. In coll. DeLong. - *Paratype*: 2 ♀, same data as holotype. In coll. DeLong.

Diagnosis: Body structure as in *E. acuminatus* Om. but face somewhat flatter and crown sharply produced. Male genitalia as in *E. acuminatus* but aedeagal appendages smooth while serrate both in *acuminatus* and *breviceps*.



Figs 6-15. - 6-10. *Portanus inflatus* n. sp. - 6. Aedeagus in lateral, 7. in frontal aspect. - 8. Style. - 9. Genital plate. - 10. Side lobe of pygofer, lateral aspect. - 11-15. *Scaphytopius lineus* n. sp. - 11. Aedeagus in ventral, 12. in lateral aspect. - 13. Style. - 14. Side lobe of pygofer, lateral aspect. - 15. Genital plate.

Description

Length: ♂ 5 mm, ♀ 5.5-5.75 mm (fig. 17). Uniformly pale ochraceous. Eyes greyish brown.

Body very gracile, crown sharply triangular produced, 2.3 (♂) or 2.33-2.46 (♀) × as long at middle as near eyes, 1.23 (♂) or 1.25-1.27 (♀) × as long as broad and 1.28 (♂) or 1.4 (♀) × as long as median length of pronotum.

Aedeagal appendages (figs 18-19) smooth. Hind margin of 7th sternite (♀) slightly produced at middle with a small median notch.

5. *Scaphytopius (Convelinus) lineus* n. sp. (Figs 11-15)

Type area: Peru, Sinchona.

Type material: *Holotype:* ♂, Peru: Sinchona,

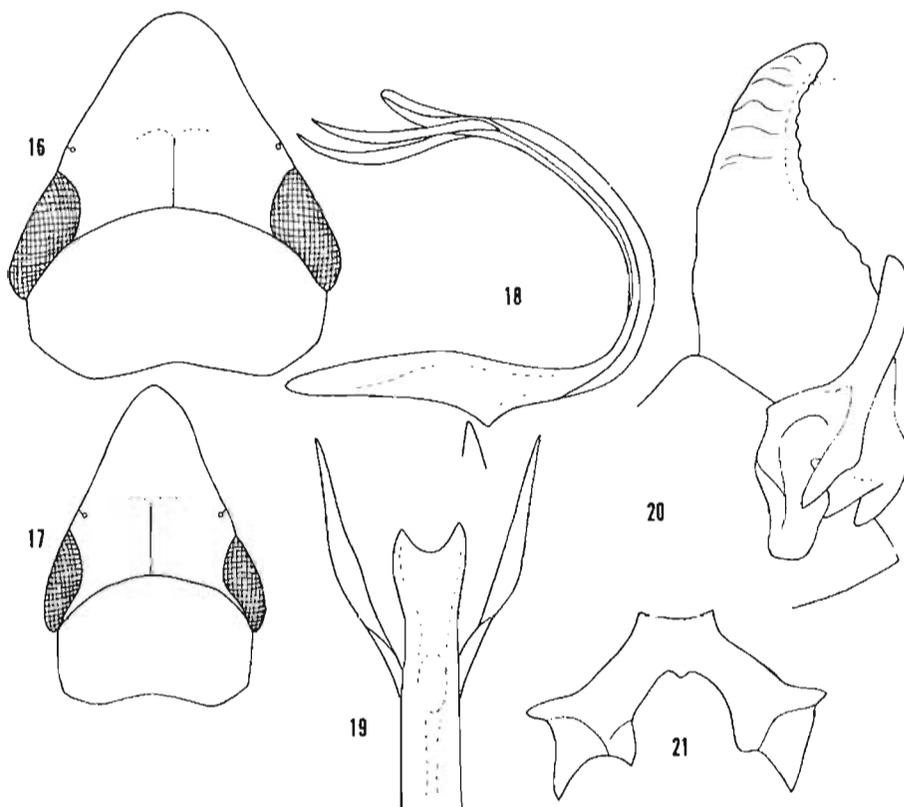
November 1943. Leg. J. G. Sanders. In coll. DeLong.

Diagnosis: Similar in form to *anadamus* DeL. but head broader and with distinct genitalia as illustrated.

Description

Length: ♂ 5 mm, female unknown.

Crown angled, a little longer at middle than basal width between eyes. Color, crown pale orange with a marginal black line; a short median white stripe at apex, one third length of crown and a broad white stripe each side of middle, extending from near apex to base. Pronotum yellow to gray with five longitudinal white stripes. Scutellum pale brown, with two longitudinal white stripes, one at middle of each side, apex yellow. Forewings grayish subhyaline, veins



Figs 16–21. – 16. *Egenus triplehorni* n. sp., head and pronotum. – 17–19. *E. gracillimus* n. sp. – 17. Same. – 18. Aedeagus, lateral aspect. – 19. Apex of same, ventral aspect. – 20–21. *Scaphytopius picturatus* (Osb.). – 20. Genital plate and stylus. – 21. Connective.

brown. Face dull yellow with a submarginal black line beneath vertex margin.

Male genitalia (Figs. 11–15) with plates somewhat triangular, longer on outer than inner margin at base, two thirds as wide at base as length on inner margin, apices bluntly pointed. Style elongate, narrow, apical third slender, slightly enlarged apically. Aedeagal shaft broadened at apex, slightly angularly excavated apically; each side bearing a slightly rounded lateroapical lobe with a conspicuous apical spine which curves laterocaudally. Pygofer broad apically bearing a ventrocaudal spine on ventral vargin.

6. *Scaphytopius (Convelinus) spinosus* n. sp.
(Figs 28–32)

Type area: Peru, Sinchona.

Type material: *Holotype:* ♂, Peru: Sinchona XI-1943. Leg. J. G. Sanders. In coll. DeLong.

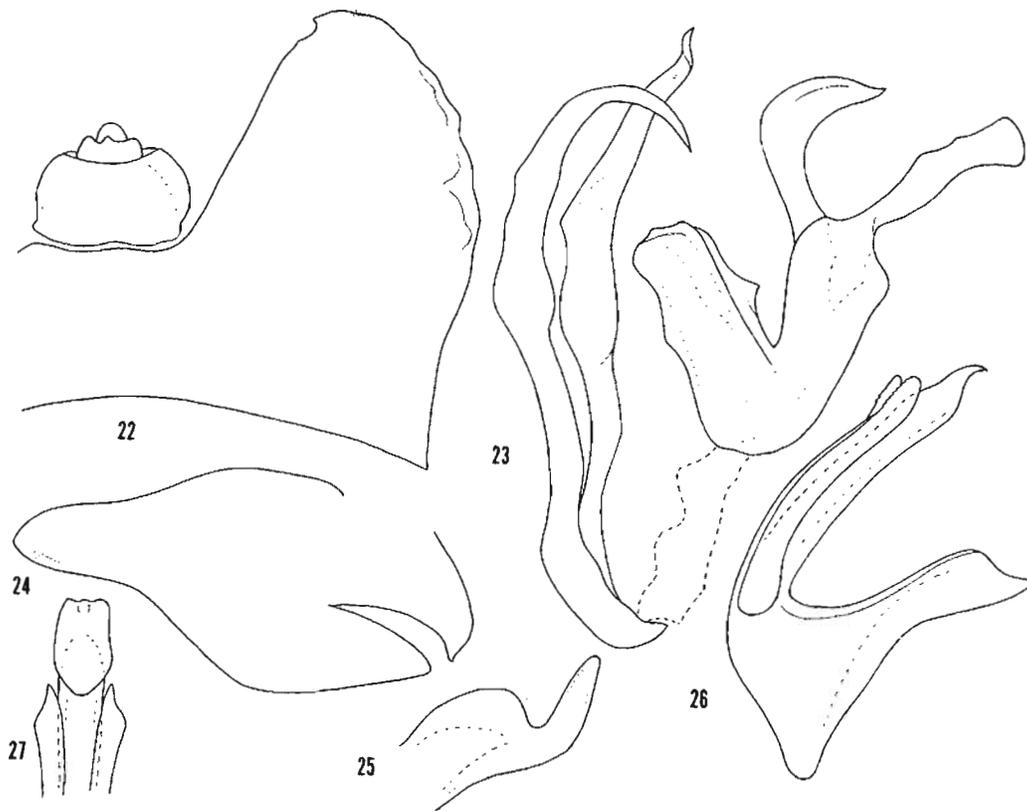
Diagnosis: In general appearance resembling *S. flavens* DeL. but without color markings on crown and with different ♂ genitalia as illustrated.

Description

Length of male 4.5 mm, female unknown.

Crown bluntly pointed, length equaling basal width between eyes. Color, crown orange, a white spot at apex and a white spot each side of apex on margin. Pronotum gray mottled with brown spots. Scutellum yellow with brown markings. Forewings white, veins and vermiculate markings brown. A brown spot on disc and a brown spot at apex of clavus. A series of brown “veinlike” markings on costa. Face yellow.

Male genitalia (Figs 28–32) with plates narrowed and rounded at apex, one and one half times as long as broad at base. Style with apical third finger like, curving slightly outwardly.



Figs 22–27. – 22–23. *Scaphytopius picturatus* (Osb.). – 22. Pygofer and anal tube. – 23. Aedeagus, lateral aspect. – 24–27. *S. atrifrons* n. sp. – 24. Side lobe of pygofer, lateral aspect. – 25. Apex of style. – 26. Aedeagus, lateral aspect. – 27. Apex of same, ventral aspect.

Aedeagal shaft tube-like, curving dorsally. Pygofer with a robust spine arising ventrally at two thirds length of pygofer, curving dorsally to apex, paralleling ventral and a portion of apical margin of pygofer.

7. *Scaphytopius (Convelinus) atrifrons* n. sp.
(Figs 24–27, 42)

Type area: Peru, Machu Picchu.

Type material: *Holotype:* ♂, Peru: Machu Picchu 25-XI-1976. Leg. D. M. DeLong. In coll. DeLong.

Paratype: same data as holotype. In coll. DeLong.

Diagnosis: Related to *S. fulvostriatus* Lv. from Ecuador but differing in coloration and with different ♂ genitalia as illustrated.

Description

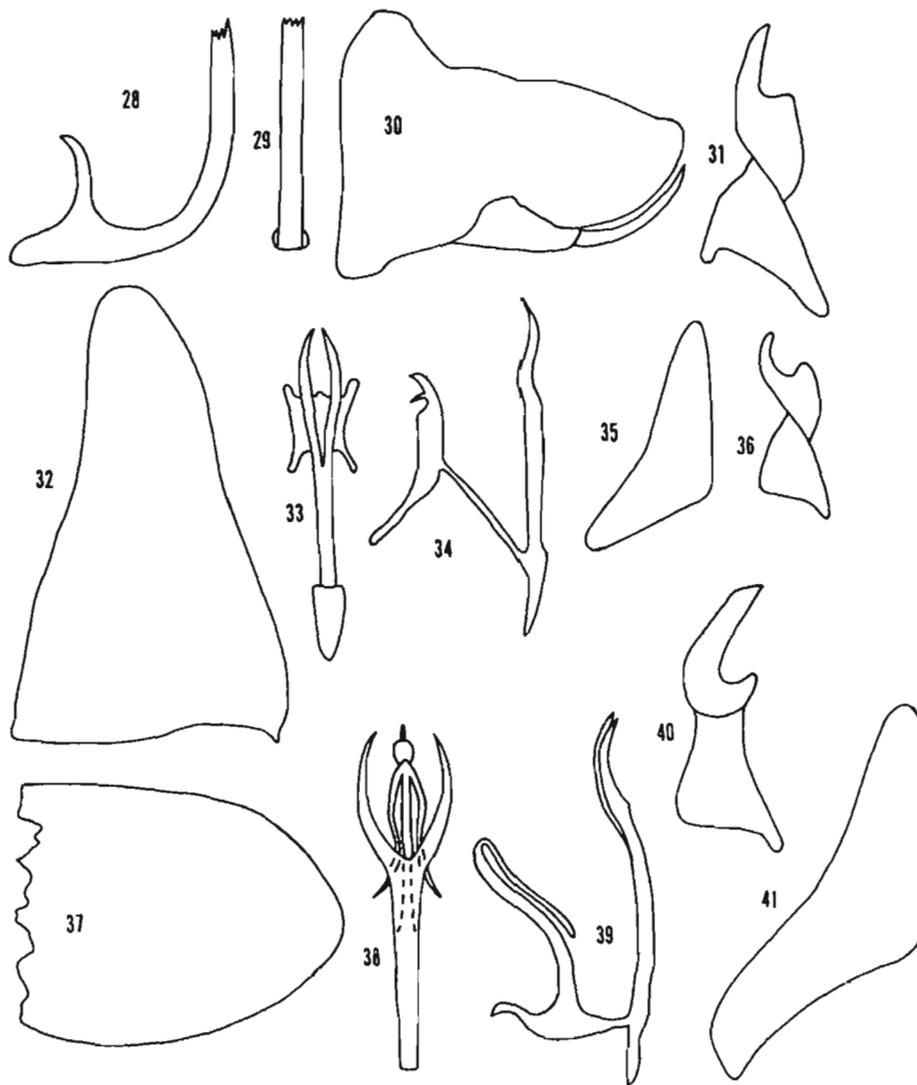
Length 4.25 mm.

Face black, upper margin narrowly whitish, a

transverse row of 3 very indistinct pale spots below upper margin. Crown whitish ochraceous, anterior margin with a narrow blackish transverse band broken at middle; disk with broad longitudinal orangish band on either side. Eyes pale grey. Pronotum pale grey, anterior margin orangish at middle, disk with 6 longitudinal fulvous bands, each with dense fuscous irroration. Scutellum orangish, base with two short dark stripes on either side, disk with traces of fuscous irroration. Elytra hyaline with slight fulvous tinge, apex smoky, subapical area with a few milky spots, veins mainly dark brown. Under surface and femora mainly blackish, tibiae pale ochraceous, hind tibiae with dark spots.

Body rather robust. Crown short, roundedly bluntly angular, a little longer than broad, $1.33 \times$ as long at middle as laterally, $0.8 \times$ as long as median length of pronotum.

Male genitalia in Figs 24–27, 42. Side lobes of



Figs 28–41. –28–32. *Scaphytopius spinosus* n. sp. –28. Aedeagus in lateral, 29. in ventral aspect. –30. Side lobe of pygofer, lateral aspect. –31. Style. –32. Genital plate. –33–36. *S. divisus* n. sp. –33. Aedeagus in ventral, 34. in lateral aspect. –35. Genital plate. –36. Style. –37–41. *S. bifidellus* n. sp. –37. Side lobe of pygofer, lateral aspect. –38. Aedeagus in ventral, 39. in lateral aspect. –40. Style. –41. Genital plate.

pygofer narrow, strongly setose. Genital plates very short, without macrosetae. Aedeagus with two basal appendages lying close to shaft.

8. *Scaphytopius (Cloanthanus) divisus* n. sp.
(Figs 33–36)

Type area: Peru, Sinchona.

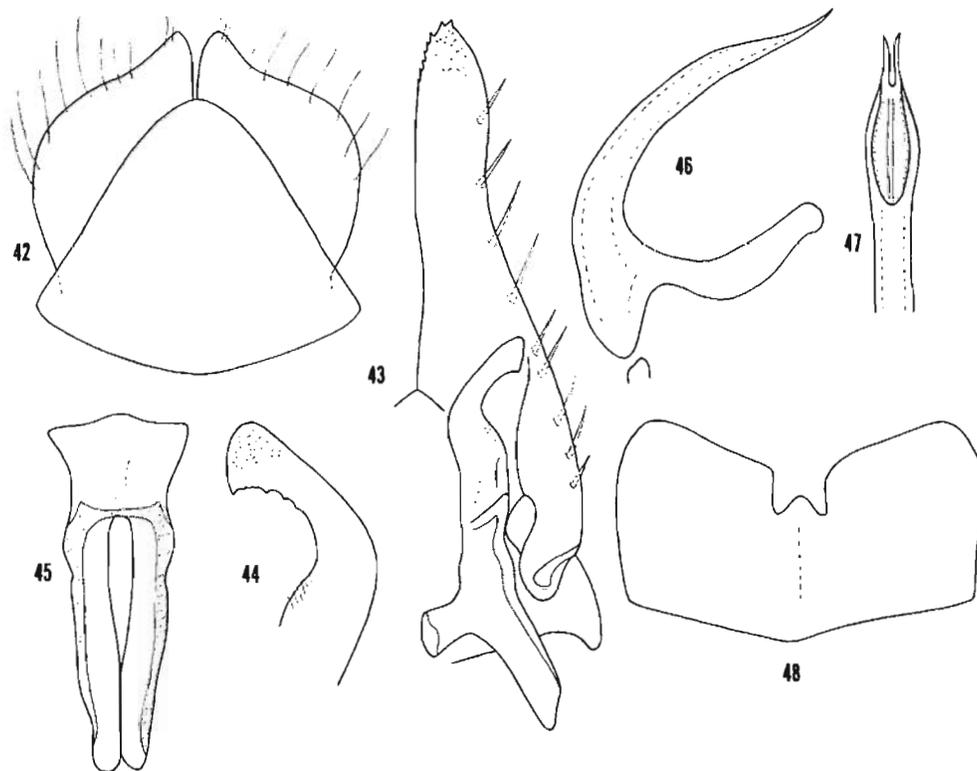
Type material: Holotype: ♂, Peru: Sinchona, XI-1943. Leg. J. G. Sanders. In coll. DeLong.

Diagnosis: Similar in size and coloration to *S. spinosus* DeL & Lv. but with distinct male genitalia as illustrated.

Description

Length of male 4.5 mm, female unknown.

Crown bluntly angled, longer at middle than basal width between eyes. Color similar to *spinus*, crown orange with white spots on



Figs 42–48. – 42. *Scaphytopius atrifrons* n. sp., genital plate and valve. – 43–48. *Agudus strigilifer* n. sp. – 43. Genital plate and style. – 44. Apophysis of style. – 45. Connective. – 46. Aedeagus, lateral aspect. – 47. Apex of same, ventral aspect. – 48. 7th sternite (♀).

margin and one each side next eye near base. Pronotum gray with brown mottling, anterior margin yellow. Scutellum yellow with white markings. Forewings white with brown veins and vermiculate markings. A brown spot on disc, at apex of clavus and numerous heavy brown costal markings. Face buff.

Male genitalia (Figs 33–36) with plates triangular, a little longer than width at base. Style with apical fourth finger-like, pointed at apex and curving outwardly. Aedeagal shaft (ventral portion) bifid at more than one-half its length, the two portions curving outwardly, then inwardly at apices. The dorsal portion of aedeagus quadrangular with short processes at each of the four corners. Pygofer rounded at apex.

9. *Scaphytopius (Cloanthanus) bifidellus* n. sp. (Figs 37–41)

Type area: Peru, Sinchona.

Type material: *Holotype:* ♂, Peru: Sinchona, VII-1944. Leg. J. G. Sanders. In coll. DeLong.

Diagnosis: General form and appearance of *S. cuprescens* Osb. but with distinct ♂ genitalia as illustrated.

Description

Length of male 5.2 mm, female unknown.

Crown bluntly angled, almost twice as long at middle as basal width between eyes. Color, crown pale brown with yellowish irregular longitudinal stripes. Pronotum pale brown, central portion darker brown, anterior margin yellowish. Scutellum orange with dark brown longitudinal stripes. Forewings white, subhyaline with brown veins and irregular brown markings; tip of forewing broadly brown margined. Face, upper half dark brown to black, lower half pale brown.

Male genitalia (Figs 37–41) with plates somewhat triangular, longer on outer than on inner margin, almost as broad at base as length on inner margin, apices narrow rounded. Style with

apical half narrowed, curving outwardly. Aedeagus composed of a ventral and dorsal portion. Aedeagal shaft (ventrally) with apical third bifid, the two pieces curving caudolaterally and widely separated then becoming slender apically. The dorsal portion with a slender shaft-like structure extending dorsocaudally, bearing a pair of slender apical processes which extend basad more than half the length of dorsal process. Pygofer rounded apically.

10. *Scaphytopius (Cloanthanus) picturatus*

(Osborn) n. comb.

(Figs 2-3, 20-23)

Dicyphonia picturatus Osborn, 1924, 403-404.

The original description is not repeated here. The species is readily recognized by the whitish and black coloring (pattern of head and pronotum in figs 2-3), the short roundedly bluntly angular crown ($0.8 \times$ as long as median length of pronotum, $1.6 \times$ as long at middle as laterally, $0.9 \times$ as long as broad) and the male genitalia (figs 20-23): Side lobes of pygofer short and broad. Genital plates narrow, without macrosetae. Aedeagus with long falcate basal appendages, united with the short flattened shaft by a membrane.

Material studied: Holotype: ♂, Bolivia: Coroica, Yungas, IV-1899. In coll. Osborn, Ohio State University.

11. *Agudus strigilifer* n. sp.

(Figs 43-47, 49-50)

Type area: Brazil, Parana, Vila Velha.

Type material: Holotype: ♂, Parana, Vila Velha, I-XII-1969, Leg. L. & C. W. O'Brien. In coll. DeLong.

Paratype: 1 ♀ same data as holotype. In coll. DeLong.

Diagnosis: Like *A. typicus* Om. except as noted in description, genitalia distinct as illustrated. The other species of the genus (*A. superbus* L.V., *A. sexmaculatus* L.V. and *A. longiceps* (Berg) from Argentina) are larger and differ in coloring and genitalia.

Description

Length ♂ 5 mm, ♀ 6 mm.

Like *A. typicus* Om. (Brazil, Argentina) but 1) somewhat bigger, 2) crown more acute, 2.41 (♂) or 2.83 (♀) \times as long at middle as laterally, $2.1-2.2 \times$ as long as broad and 2.3 (♂) or 2.55 (♀) \times as long as median length of pronotum (in *typicus* ♀ (♂ unknown) only slightly more than

twice as long at middle as next eyes), 3) elytra much shorter than abdomen, and 4) hind margin of 7th sternite (♀) (Fig. 48) with an inverted M-shaped median notch (in *typicus* broadly concavely excavated).

Male genitalia in Figs 43-47, 49-50: Pygofer very long and narrow, ventral margin with a fringe of short black bristles and a black basal tubercle. Genital plates with several macrosetae, apex minutely dentate. Aedeagal shaft simple, digitate, apex bifid.

12. *Agudus amabilis* n. sp.

(Figs 4, 51)

Type area: Argentina, Lules (13 km. S.), P. Tucuman.

Type material: Holotype: 1 ♀, Argentina: Lules (13 km. S.), P. Tucuman 17-X-1968. Leg. L. & C. W. O'Brien. In coll. DeLong.

Diagnosis: Similar to *A. superbus* L.V. but with much longer crown and with distinct ♀ seventh sternite.

Description

Fig. 4. Length 5.25-5.5 mm.

Rather shiny. Pale ochraceous. Frontoclypeus brownish with pale lateral arcs. Crown with two longitudinal red bands continued on to scutellum, anterior margin with fine brownish stripes. Eyes brownish. Pronotum with 4 longitudinal red bands and a faint brownish sublateral band on either side. Scutellum with 3 longitudinal red bands. Elytra yellowish hyaline; veins whitish, faintly bordered with brown. Dorsum of abdomen, under surface and legs pale.

Body relatively robust. Head sharply angulate. Face slightly convex in profile. Crown $1.88 \times$ as long at middle as laterally, $1.28-1.33 \times$ as long as broad, $1.45-1.5 \times$ as long as median length of pronotum, anterior margin scarcely carinate. Elytra a little shorter than abdomen, appendix reduced, clavus with a few extra cross veins. Hind margin of 7th sternite (♀) (Fig. 51) shallowly concave with a semicircular median notch.

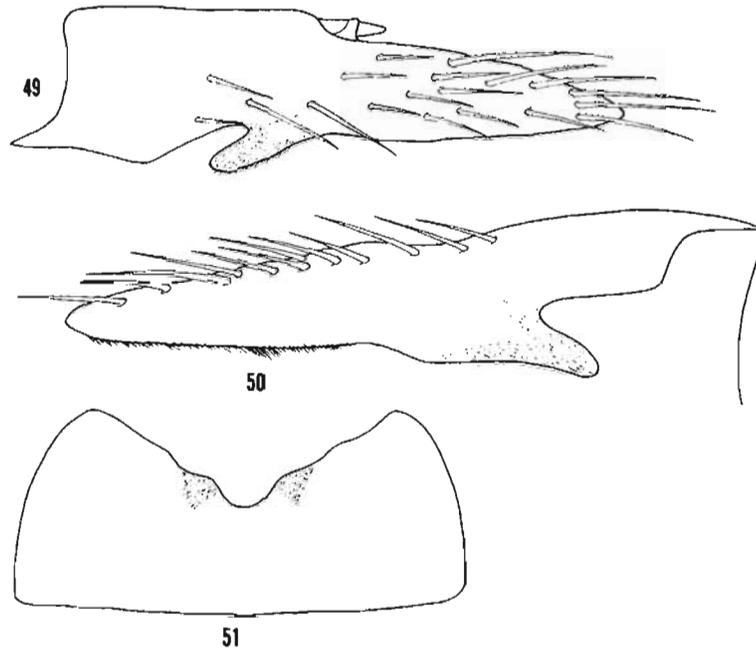
13. *Paraphlepsius orthana* n. sp.

(Figs 56-60)

Type area: Bolivia, San Esteban, Sta Cruz (49 km. N.)

Type material: Holotype: ♂, Bolivia: San Esteban, Sta. Cruz (49 km. N.) 7.XII.59 alt. 1120ft. Leg. R. Cummings. In coll. DeLong.

Diagnosis: Resembling *P. abruptus* DeL. but with distinct ♂ genitalia.



Figs 49–51. – 49–50. *Agudus strigilifer* n. sp. – 49. Side lobe of pygofer in lateral, 50. in ventral aspect. – 51. *A. amabilis* n. sp., 7th sternite (♀).

Description

Length of male 8 mm, female unknown.

Crown short and broad, more than twice as broad at base between eyes as median length, appearing almost parallel margined. Color, crown pale sordid gray without markings. Pronotum dark gray with dark brown mottling behind each eye and on apical margin. Scutellum brown with basal angles and apex yellow. Forewings subhyaline with brown ramose pigment lines.

Male genitalia (Figs 56–60) with plates more than twice as long as basal width, apices slender, rounded. Style with apical half slender, apex blunt. Aedeagal shaft long, very slender, tube like, twice as long as plates, apex slightly enlarged and curved dorsally. The basal portion also slender curved dorsally and caudally. Pygofer as long as style, narrowed somewhat at middle by a concavely curved margin and bearing a short spine on ventral margin at two thirds its length. Apex of pygofer rounded.

14. *Chlorotettix bimaculatus* n. sp. (Figs 78–79)

Type area: Brazil, Piracicaba, Sao Paulo.

Type material: *Holotype*: ♀, Brazil: Piracicaba, Sao

Paulo 4-1-1966. Leg. C. A. Triplehorn. In coll. DeLong. *Paratype*: 1 ♀ same data as holotype. In coll. DeLong.

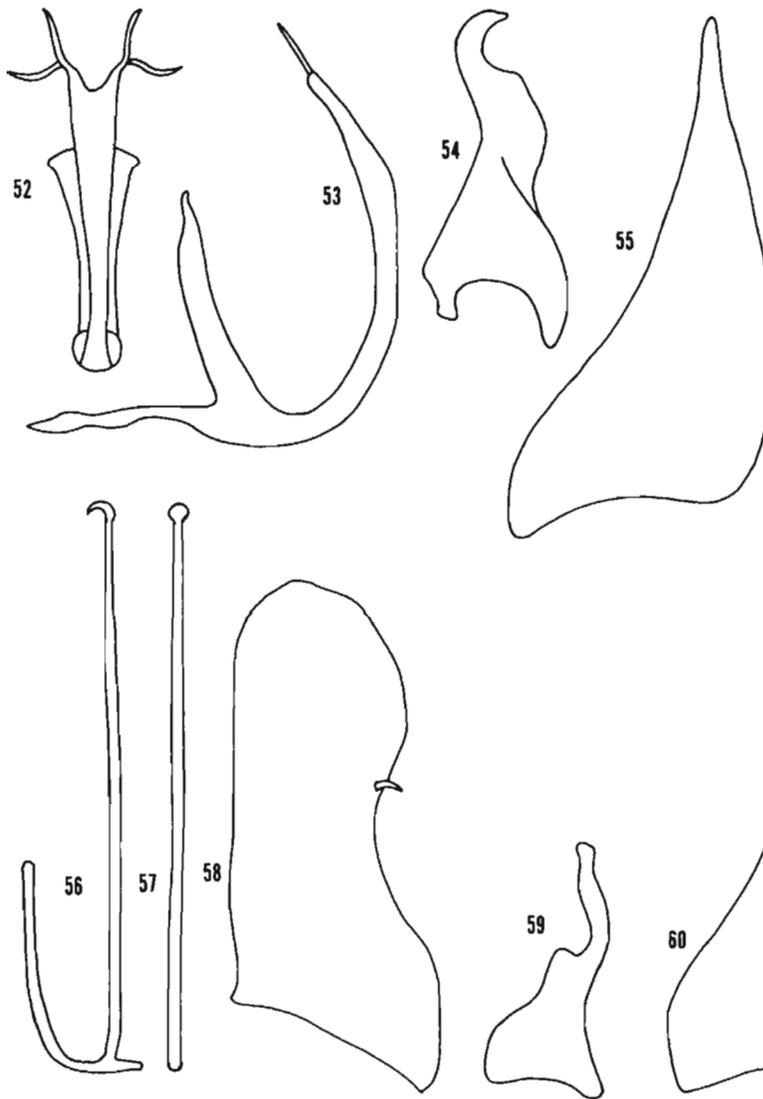
Diagnosis: Similar to *C. obsenus* DeL. but with head broader, more transverse and with distinct color markings and ♀ seventh sternite.

Description

Length 4.75–5.0 mm. Fig. 78.

Whitish ochraceous. A middle spot on anteclypeus and lateral arcs on frontoclypeus brown; genae with a triangular blackish spot below eyes. Anterior margin of head with two large squarish black spots, crown behind these spots tinged with yellow. Anterior margin of pronotum pale yellowish, disk with a dark fuscous transverse band. Scutellum yellow, transverse impression dark. Elytra brownish hyaline, veins slightly paler, costal margin whitish yellow. Dorsum of abdomen darkened at middle. Under surface yellowish, thorax with dark spots. Legs pale ochraceous, margins of hind femora dark.

Relatively robust. Head distinctly broader than pronotum. Crown of uniform length, twice as broad as long, $0.6 \times$ as long as median length of pronotum. Pronotum short and broad, about $2.24 \times$ as broad as long at middle. 7th sternite (♀) in Fig. 79.



Figs 52-60. 52-55. *Chlorotettix sinchona* n. sp. - 52. Aedeagus in ventral, 53. in lateral aspect. - 54. Style. - 55. Genital plate. - 56-60. *Paraphlepsius orthana* n. sp. - 56. Aedeagus in lateral, 57. in ventral aspect. - 58. Side lobe of pygofer, lateral aspect. - 59. Style. - 60. Genital plate.

15. *Chlorotettix sinchona* n. sp.
(Figs 52-55)

Type area: Peru, Sinchona.

Type material: Holotype: ♂, Peru: Sinchona. XI-1943. Leg. J. G. Sanders. In coll. DeLong.

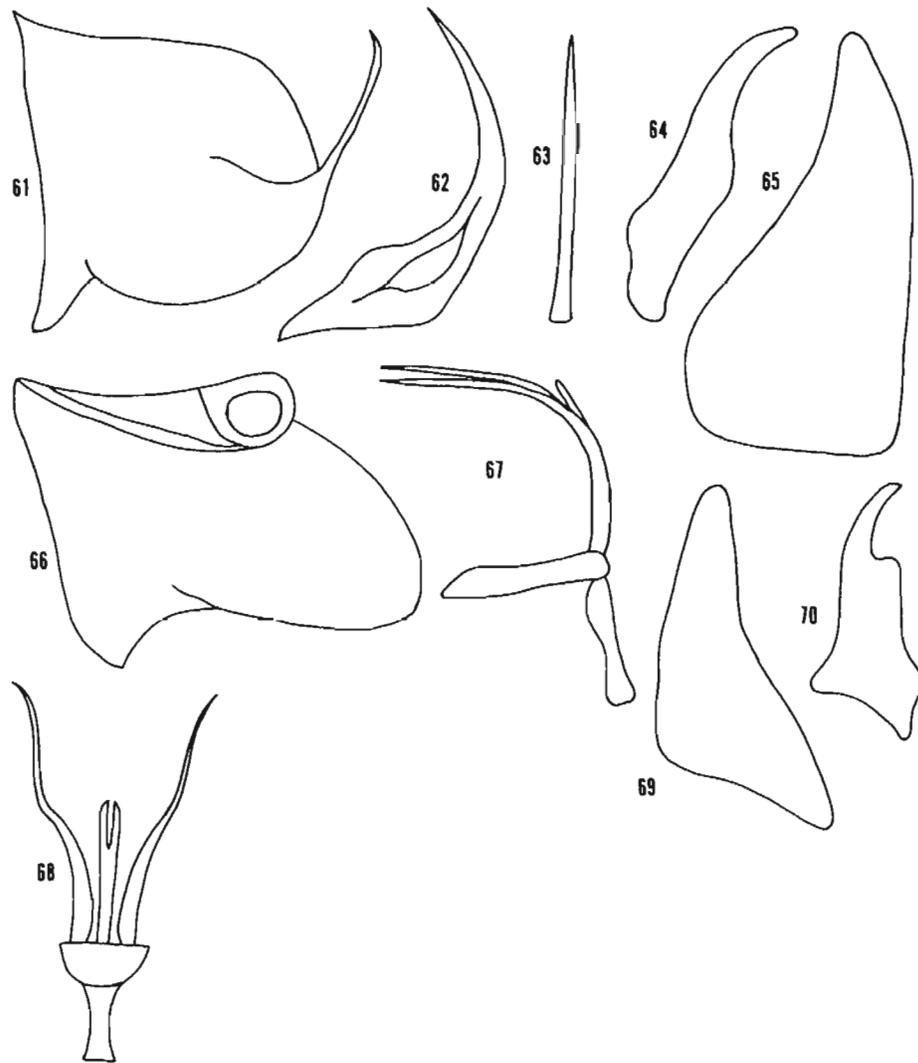
Diagnosis: Resembling *C. minimus* Bak. but with specific color markings on head and with distinct ♂ genitalia.

Description

Length of male 7.5 mm, female unknown.

Crown rounded, twice as wide between eyes at base as median length. Color yellowish green, a small brown spot at apex of clavus, each side.

Male genitalia (Figs 52-55) with plates twice as long as basal width, apices pointed. Style with apex slender, curved outwardly. Aedeagus slender, broadened apically, slightly notched at middle, bearing a slender bifid process each side at apex, one portion extending laterally and one portion of bifid process extending caudally. Pygofer rounded apically.



Figs 61–70. – 61–65. *Chlorotettix hastulus* n. sp. – 61. Side lobe of pygofer, lateral aspect. – 62. Aedeagus in lateral, 63. in ventral aspect. – 64. Style. – 65. Genital plate. – 66–70. *C. frameus* n. sp. – 66. Side lobe of pygofer, lateral aspect. – 67. Aedeagus in lateral, 68. in ventral aspect. – 69. Genital plate. – 70. Style.

16. *Chlorotettix hastulus* n. sp.
(Figs 61–65)

Type area: Brazil, Surumu, Roraima.

Type material: Holotype: ♂, Brazil: Surumu, Roraima. IX-1966. Leg. M. Alverenga, F. M. Oliveira. In coll. Museo de Zoologia da Universidade Sao Paulo, Brazil.

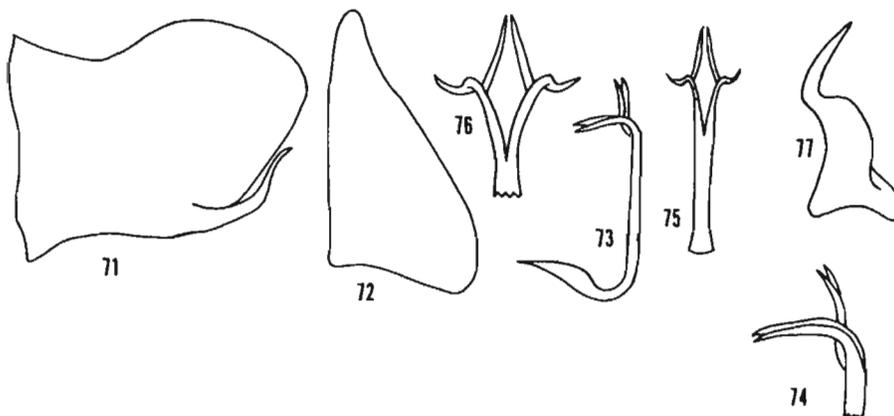
Diagnosis: Resembling *C. sinchona* in general form and color but with distinct ♂ genitalia.

Description

Length of male 5.5 mm, female unknown.

Crown broadly rounded, more than twice as wide at base between eyes as median length. Color yellowish green.

Male genitalia (Figs 61–65) with plates almost twice as long as basal width, apices narrow,



Figs 71–77. *Chlorotettix torqus* n. sp. – 71. Side lobe of pygofer, lateral aspect. – 72. Genital plate. – 73. Aedeagus, lateral aspect. – 74. Apex of same. – 75. Aedeagus in ventral aspect. – 76. Apex of same. – 77. Style.

rounded. Style elongate, apical portion slender curving slightly outwardly, apex blunt. Aedeagus spine-like, in lateral view broad and bifid at base tapered to slender pointed apex. Pygofer bearing a long slender spine, more than half as long as pygofer, from middle of apex, each side.

17. *Chlorotettix frameus* n. sp.
(Figs 66–70)

Type area: Brazil, Aragarças, Go.

Type material: *Holotype:* ♂, Brazil: Aragarças, Go. XI-1965, Leg. M. Alvarenga. In coll. Museo de Universidade de Sao Paulo, Brazil.

Diagnosis: Color and form of *C. sinchona* Del & Lv. but with distinct ♂ genitalia.

Description

Length of male 6 mm, female unknown.

Crown rounded, more than twice as wide at base between eyes as median length. Color greenish yellow.

Male genitalia (Figs 66–70) with plates twice as long as width at base, apices narrow, rounded. Style with apical portion narrow, finger-like, slightly curved outwardly. Aedeagal shaft slender, tube-like, bifid at twothird its length, the two terminal portions parallel, pointed at apex. Two long slender processes, twice as long as shaft and not contiguous with it, arise at base and extend caudally along shaft then curve dorsally. Pygofer with a sclerotized spine or plate-

like structure on dorsal margin near dorsal portion of apical margin and extending ventrally inside pygofer.

18. *Chlorotettix torqus* n. sp.
(Figs 71–77)

Type area: Brazil, Suruma, Roraima.

Type material: *Holotype:* ♂, Brazil: Surumu, Roraima IX-1966. Leg. M. Alvarenga, F. M. Oliveira. In coll. Museo de Zoologia da Universidade de Sao Paulo, Brazil.

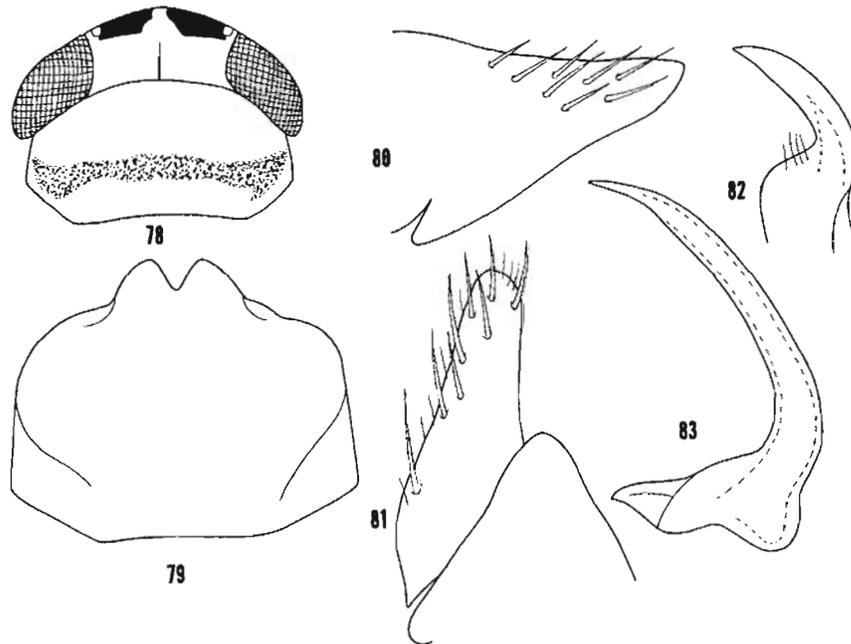
Diagnosis: Resembling *C. minimus* Bak. in form and color but with distinct ♂ genitalia.

Description

Length of male 4.5 mm, female unknown.

Crown rounded, one and one half times as wide at base between eyes as median length. Color yellowish green.

Male genitalia (Figs 71–77) with plates almost twice as long as basal width, apices narrow, apex rounded. Style with apical third spine-like, curving outwardly, apex sharp-pointed. Aedeagal shaft bifid at two thirds its length, producing two terminal portions each curving dorsally and more than half length of shaft. Two processes arising on inner margin of shaft, about one-fourth length of shaft extend caudally between the two curved processes, then sloping inwardly and are contiguous at apex. Pygofer with a stout spine, about one-third length of pygofer arises on ventrocaudal margin and extends dorsally along caudal margin.



Figs 78–83. – 78–79. *Chlorotettix bimaculatus* n. sp. – 78. Head and pronotum. – 79. 7th sternite (♀). – 80–83. *Stirellus obrienorum* n. sp. – 80. Side lobe of pygofer, lateral aspect. – 81. Genital plate and valve. – 82. Apex of style. – 83. Aedeagus, lateral aspect.

19. *Stirellus obrienorum* n. sp.
(Figs 80–83)

Type area: Brazil, Parana, Vila Velha.

Type material: *Holotype*: ♂, Brazil: Parana, Vila Velha, 12-1-1960. Leg. L & C. W. O'Brien. In coll. De-Long.

Diagnosis: Resembling *S. picinus* (Berg) but readily distinguished from it and all other species by the ♂ genitalia as illustrated.

Description

Length 3 mm.

Pale ochraceous. Face pale brown, frontoclypeus with black lateral arcs. Anterior margin of crown with a slight dark dash on either side. Eyes brownish. 6 small dots in anterior margin of pronotum and 2 at middle of basal margin of scutellum black. Under surface mainly blackish with pale segmental margins. Legs pale brownish, femora with longitudinal dark stripes, hind tibiae with black spots.

Crown acutely triangular, $1.41 \times$ as long at middle as laterally, $1.54 \times$ as long as broad, $1.13 \times$ as long as median length of pronotum. Elytra with 2 closed subapical cells.

Male genitalia in Figs 80–83. Genital plates elongately triangular, macrosetae not regularly arranged. Side lobes of pygofer sharply triangular. Aedeagal shaft slender, digitate.

The species is dedicated to the collectors Drs. Charles W. and Lois B. O'Brien.

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