

Papéis Avulsos de Zoologia

THE GENUS *PORASILUS* CURRAN IN SOUTH AMERICA (DIPTERA, ASILIDAE)

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ABSTRACT

The genus *Porasilus* was established by Curran in 1934, monotypic for *barbiellinii*, from São Paulo, Brazil. In the present paper three new species from Brazil (*satyrus*, sp. n., from Forte Príncipe, Acre; *lesbius*, sp. n., from São Bernardo do Campo, São Paulo; and *intermedius*, sp. n., from Manaus, Amazonas), and one from Peru (*garciai*, sp. n., from Lima, Lima) are described, and a tentative key to identify them is proposed. Illustrations of the male wing venation of *intermedius*, sp. n., and the male genitalia of all known species of the genus are included.

Porasilus Curran

Porasilus Curran, 1934: 15. Type-species, *barbiellinii* Curran (orig. des.).
Refs. — Bromley, 1937: 102; Hull, 1962: 471; Martin & Papavero, 1970: 69.

The genus can be distinguished from the very similar *Diplosynopsis* Enderlein, 1914, by the lack of a union between the first branch of the third vein and the petiole of the marginal cell (first submarginal cell closed).

KEY TO SPECIES

1. Hairs of palpi reddish yellow; hairs of scutellum mainly reddish yellow; basal four tarsal segments reddish *barbiellinii* Curran
- Hairs of palpi black, sometimes with a few white ones at the base; scutellar hairs black, white, or black and white; basal four tarsal segments black 2

2. Scutellar hairs white, marginal bristles white; male with the costa not dilated nor the distal half of the subcostal cell darkened; 15-17 mm (Peru) *garciai*, sp. n.
- Scutellar hairs black and white, or black, marginal bristles black; male with the costa somewhat dilated and the distal half of the subcostal cell darker than the remainder of wing; 18-26 mm (Brazil). 3
3. Hairs of palpi black; scutellar hairs black; tibiae wholly shining black *lesbius*, sp. n.
- Hairs of palpi black, with a few white ones at the base; scutellar hairs black and white; tibiae reddish brown with shining black apex 4
4. Face yellowish to golden pollinose; second branch of third vein ending below wing apex; spur vein of second submarginal cell short and inconspicuous *satyrus*, sp. n.
- Face silvery pollinose; second branch of third vein ending above wing apex, first branch not reaching nor united to petiole of marginal cell; spur vein of second submarginal cell well developed and conspicuous *intermedius*, sp. n.

***Porasilus barbiellinii* Curran**

Porasilus barbiellinii Curran, 1934: 15-16. Type-locality: Brazil, São Paulo; Martin & Papavero, 1970: 69.

Material examined: 28 males and 36 females, from the following localities: Brazil, *São Paulo*: São Paulo (Ipiranga), III.1923 (Spitz) — 1♂; III.1924 (Spitz) — 1♂; III-IV.1936 (Morretes) — 8♀; III.1937 (Morretes) — 1♂; III.1940 (Carrera & Lane) — 3♂, 1♀; II.1942 (Lane) — 1♂; IV.1947 (Dente) — 1♀; IV.1956 (Pereira) — 1♂; (Cidade Jardim), IV.1936 (Morretes) — 1♂, 1♀; Embu, II.1946 (Lane); — 1♂, 1♀; Atibaia, II.1947 (Navajas) — 1♂; Ibiti, III.1947 (Lane) — 1♂; *Minas Gerais*: Passos, III.1961 (Elias) — 14♂, 24♀; Araguari, III.1930 (Spitz) — 1♂; Caxambu, III.1932 (Marques) — 1♂, all in the Museu de Zoologia da Universidade de São Paulo.

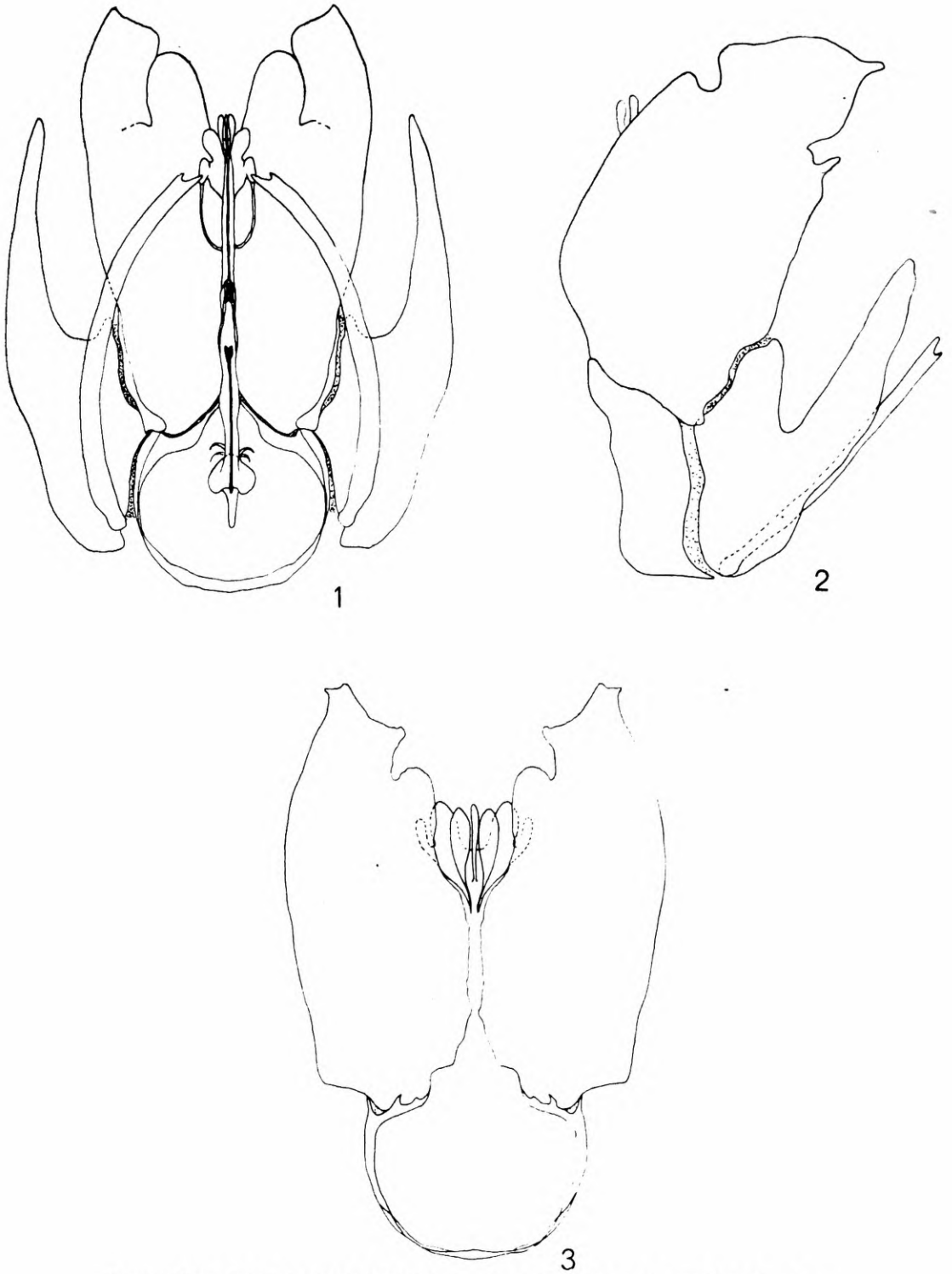
This species was described based upon specimens from São Paulo. Its range now extends up to the State of Minas Gerais. It is very similar to *satyrus*, sp. n., in the genitalic characters, but morphologically can be easily distinguished by the presence of the reddish basal four tarsal segments. Genitalia as in figs. 1-3.

***Porasilus satyrus*, sp. n.**

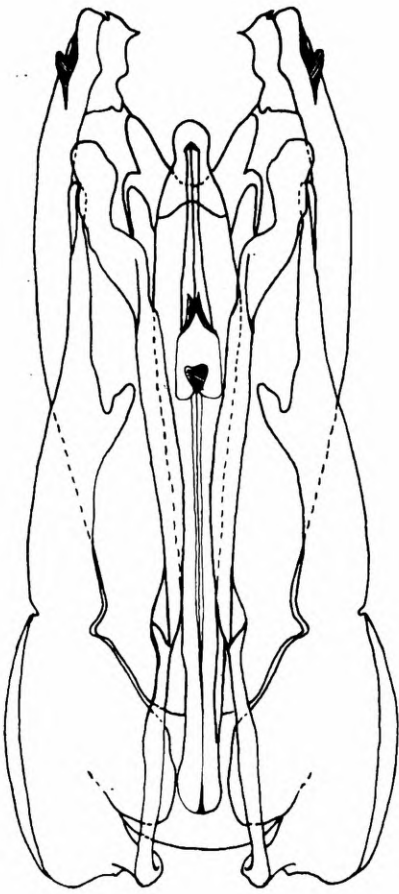
Very similar to *intermedius*, sp. n., but differs in the shape of the basistylus and distal processes of the epandrium.

Male — Length: 21 mm; wing length: 14 mm.

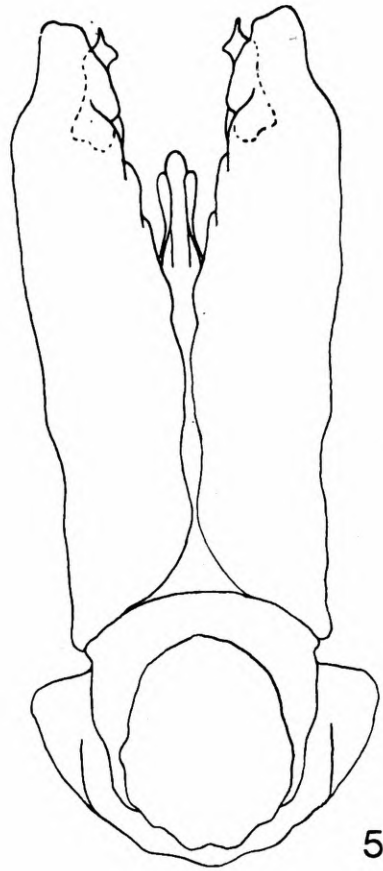
The description follows that of *intermedius*, sp. n., except in the following.



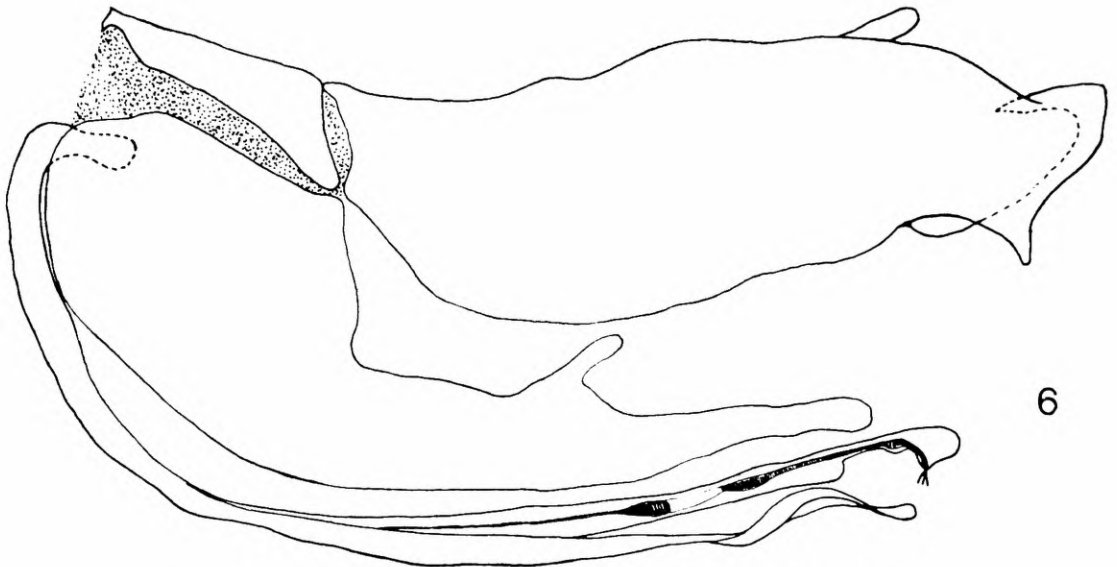
Porasilus barbiellini Curran, ♂, genitalia: 1, ventral view; 2, lateral view; 3, dorsal view.



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Porasilus satyrus, sp. n., ♂, genitalia: 4, ventral view;
5, dorsal view; 6, lateral view.

Head: face yellowish to golden pollinose; style thrice the length of third antennal segment.

Thorax: scutellum with 4-6 strong black marginal bristles.

Abdomen: tergites 6 and 7 wholly silvery pollinose. Genitalia as in figs. 4-6.

Wings: spur vein of second submarginal cell with little development, inconspicuous.

Female: Unknown.

Type-material: Holotype ♂, from Forte Príncipe, Acre, Brazil, 25.XI.1962 (Bokermann), 1♂ paratype, from Jataí, Goiás, Brazil, I.1955 (Carrera & al.) and 1♂ paratype, from Fazenda Monjolino, Corumbá, Goiás, Brazil, XI.1945 (Barretto), all in the Museu de Zoologia, Universidade de São Paulo.

Porasilus lesbius, sp. n.

This species is morphologically very similar to *barbiellini* Curran and has about the same geographical distribution, but it may be readily distinguished from the latter by genitalic characters.

Male — Length: 25 mm; wing length: 16 mm.

The description follows that of *barbiellini* Curran, except in the following:

Head: yellowish vestiture; occipital bristles yellowish, with a few black ones in the upper margin; antennal hairs black; bristles of palpi black; hairs of proboscis yellowish white.

Thorax: prothorax with yellowish hairs; mesonotum and scutellum with black hairs and bristles, and some yellowish bristles in the humeral calli; scutellum with black hairs and six strong black marginal bristles.

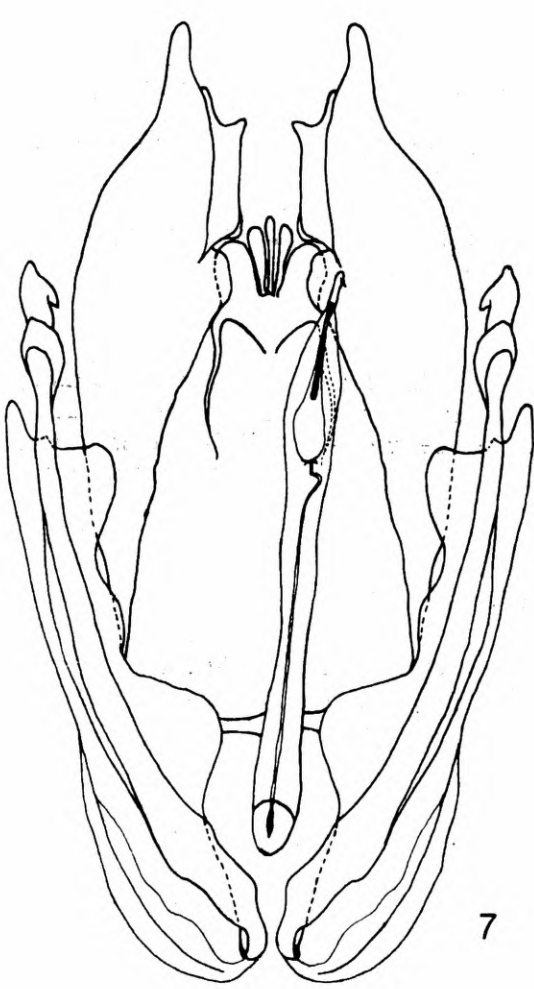
Abdomen: sides of tergites 1-5 yellowish brown to silvery pollinose; tergites 6 and 7 silvery pollinose, the degree of pollinosity of the sixth segment is very variable; yellowish to white vestiture, first tergite with black bristles on both sides. Genitalia as in figs. 7-9.

Legs wholly shining black.

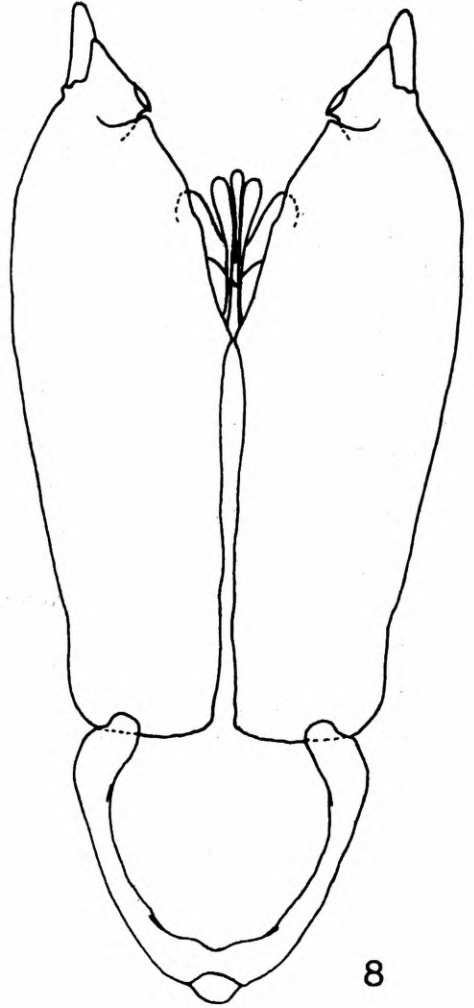
Wings: costa somewhat dilated in the apical half, and the distal half of the subcostal cell darker than the remainder.

Female: pleurae almost entirely with black hairs; middle and posterior femora and tibiae with black hairs.

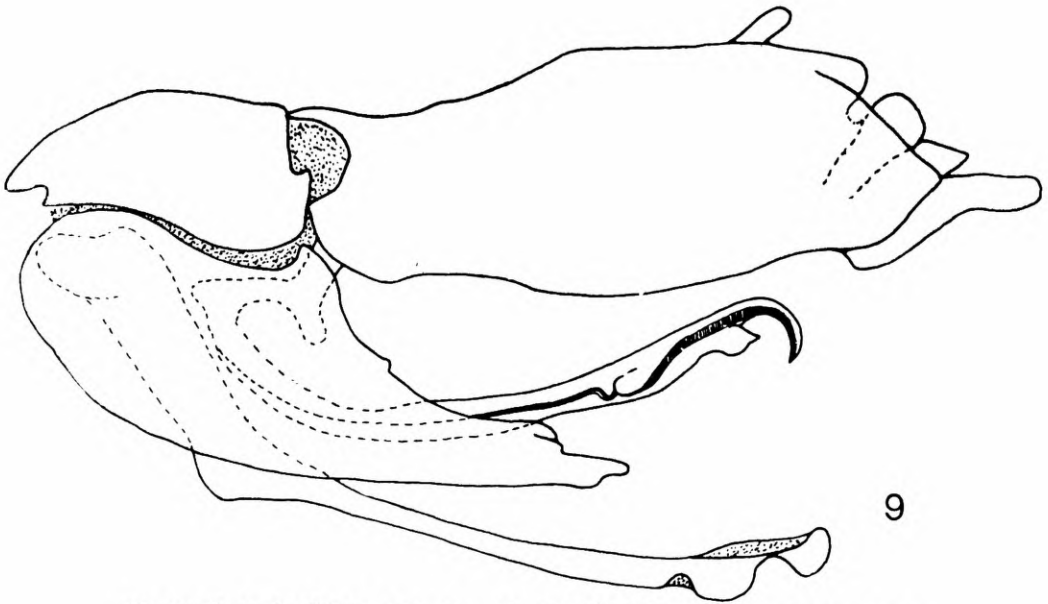
Type-material: Holotype ♂, from São Bernardo do Campo, São Paulo, Brazil, III.1926 (Spitz), 5 ♂♂ and 5 ♀♀ paratypes, from Campos de Jordão, São Paulo, Brazil, 18.II.1958 (Lenko), 1 ♂ paratype, from Campos de Jordão, São Paulo, Brazil, 22.I.1936 (Lane), 1 ♀ paratype,



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Porasilus lesbius, sp. n., ♂, genitalia: 7, ventral view; 8, dorsal view; 9, lateral view.

from Jardim Paulista, São Paulo, Brazil, 26.III.1944 (Ramalho), 1 ♀ paratype, from Embu, São Paulo, Brazil, 15.II.1946 (Lane), 1 ♀ paratype, from Campos de Jordão, São Paulo, Brazil, III.1952 (Brandão), 1 ♀ paratype, from Campos de Jordão, São Paulo, Brazil, 1650 m, II.1953 (Travassos Fo.), and 1 ♀ paratype, from Santa Bárbara, Caracá, Minas Gerais, Brazil, III.1953 (Machado), all in the Museu de Zoologia, Universidade de São Paulo.

Porasilus garciai, sp. n.

This is the smallest species of the genus. It was collected in the arid coastal region of the Department of Lima and the warm interandine valley of Tarma, Peru. It is certainly related to *intermedius*, sp. n., by genitalic characters.

Male — Length: 15 mm; wing length: 10 mm.

Head: face, frons, vertex and occiput silvery pollinose; vestiture black and white; antennae black, slightly silvery pollinose, first segment 2.5 times the length of second segment, segment 3 pyriform, laterally compressed, twice the length of segment 2, with a tapering apical style, thrice the length of segment 3, slightly thickened subapically and with a terminal spine; antennal hairs white; ocellar tubercle bristles black; mystax beset with black and white intermixed bristles, covering all the surface of the gibbosity which extends on the lower two thirds of the face; occiput beset with white and some black bristles in the upper margin; beard white; palpi black, with long, black hairs; proboscis black with a noticeable middorsal keel and long, white hairs on the basal half of the lower edge.

Thorax brown, yellowish white pollinose, with black and white hairs and bristles; scutellum with white hairs and 4 pairs of strong white marginal bristles; hairs of metanotal slopes white; halteres pale yellowish brown.

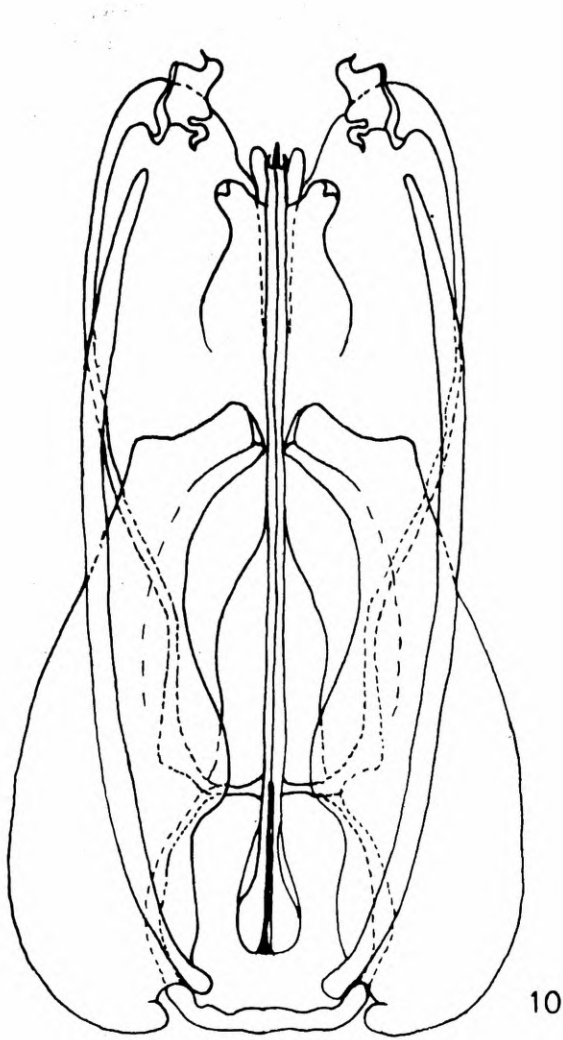
Abdomen with black background; tergites 1-5 with the posterior and lateral margins yellowish brown and silvery pollinose; tergites 6 and 7 silvery, 8 dark brown; sternites yellowish to silvery pollinose; vestiture white; genitalia shining black with black and reddish yellow hairs (Figs. 10-12).

Legs: coxae dark reddish brown, yellowish pollinose, with white bristles; femora dark reddish brown with yellowish white vestiture and some black bristles; tibiae reddish brown with the distal fifth darker, vestiture yellowish with some black bristles; tarsi dark reddish brown to black, vestiture reddish brown, bristles black; claws black, with reddish basal portion; pulvilli pale yellowish brown.

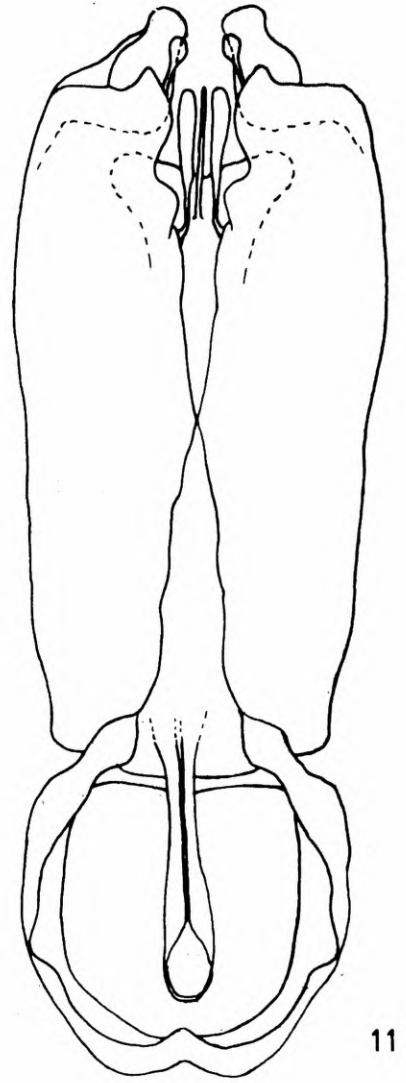
Wings clear, veins dark reddish brown; second branch of third vein ends at, or slightly below, wing apex.

Female: differs only in that tergites 6 and 7 have small amount of silvery pollinosity.

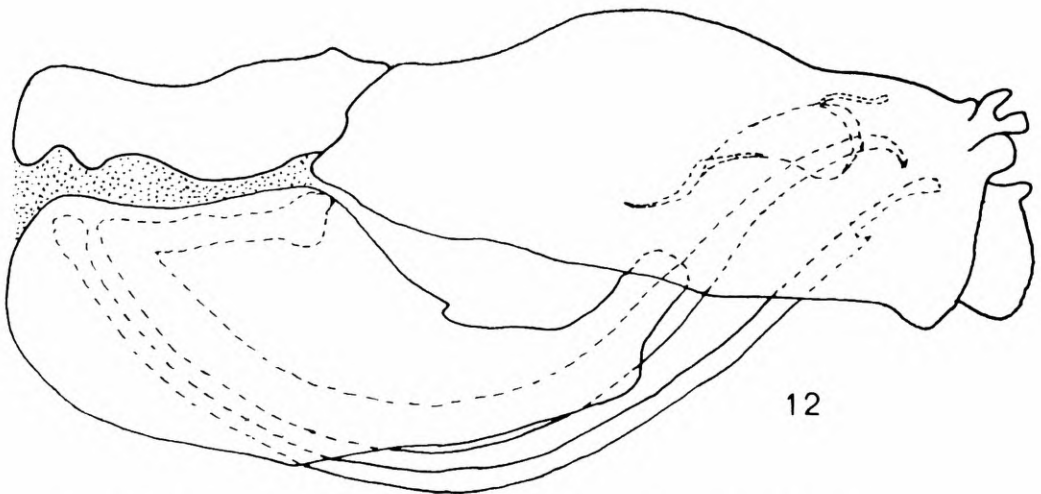
Type-material: Holotype ♂, from Lima, Lima Dept., Peru, XII.1964 (La Fuente), 1 ♂ paratype, from Tarma, Junín Dept., Peru, 20.VIII.1963 (Oré) and 1 ♀ paratype, from Puruchuco, Lima Dept., Peru, 27.II.1966 (García), all in the Museu de Zoologia, Universidade de São Paulo.



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Porasilus garciai, sp. n., ♂, genitalia: 10, ventral view;
11, dorsal view; 12, lateral view.

The species is dedicated to Prof. Renán García A., from the Programa Académico de Ciencias Biológicas, Universidad Nacional Mayor de San Marcos, Lima, Peru.

Porasilus intermedius, sp. n.

This species is easily distinguished from the other species of the genus by the second branch of the third vein, which ends above the wing apex. The male genitalia is similar to that of *lesbius*, sp. n., and *garciai*, sp. n.

Male — Length: 19 mm; wing length: 13 mm.

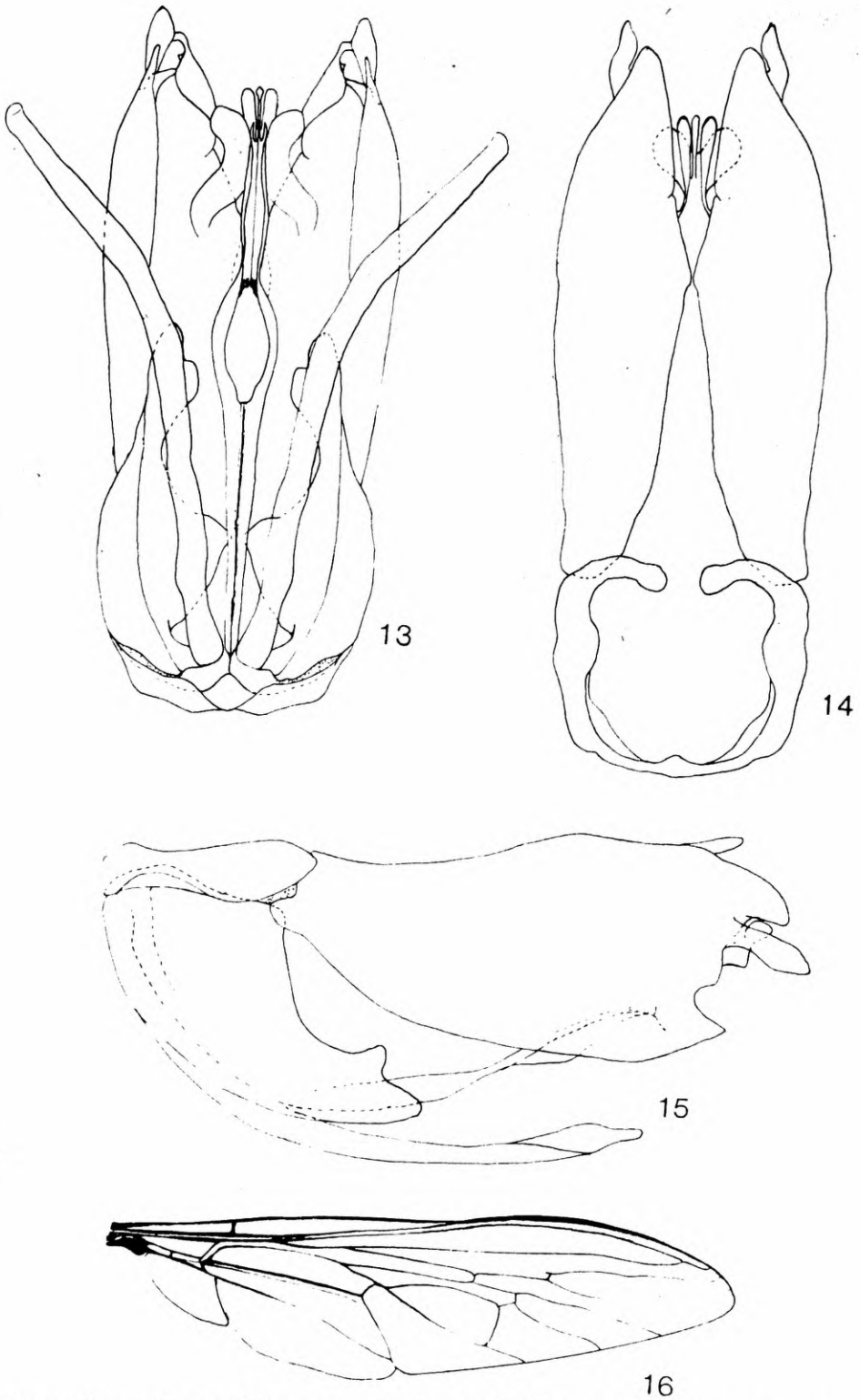
Head black; face and occiput silvery pollinose; vertex and frons yellowish pollinose; vestiture white with some black hairs; antennae dark reddish brown with black and some yellowish hairs; first segment 2.5 times the length of second, segment 3 pyriform, laterally compressed, twice the length of second, with tapering apical style, 3.5 times the length of third segment, slightly thickened subapically, with a short terminal spine; frons with white and some black bristles; ocellar tubercle bristles black; occiput with white and some black bristles in the upper margin; beard black; palpi black with black hairs, a few white ones on the base; proboscis shining black with a noticeable middorsal keel and long, white hairs on the basal half of the under surface.

Thorax dark reddish brown; pronotum yellowish white pollinose, with white vestiture and some black bristles; mesonotum with posterior and lateral margins and two middorsal longitudinal parallel lines yellowish brown pollinose, the latter united to the lateral margins at the transverse suture and humeral and postalar calli; vestiture and bristles black, except in the humeral calli, which mainly have yellowish white hairs; scutellum white pollinose, with black and white hairs, and 2-4 strong black marginal bristles; hairs of metanotal slopes yellowish white, pleurae silvery pollinose with black and yellowish white hairs and bristles; halteres reddish brown.

Abdomen dark reddish brown, almost black; tergite 1 silvery pollinose, with white hairs and 3 strong black bristles at each latero-posterior angle; tergites 2-5 with silvery pollinose triangular fasciae, covering the lateral sides, decreasing in size towards the apex of the abdomen; tergites 6 and 7 silvery pollinose, though the pollinosity on tergite 6 may be restricted to the posterior margin only; tergite 8 shining black; vestiture white; sternites black, silvery pollinose, with white vestiture; genitalia shining black, with black and some yellowish white hairs (Figs. 13-15).

Legs: coxae black, silvery pollinose, with white to yellowish white bristles; femora black with white hairs and some black ones in the apical third, anterior femora without bristles, middle and posterior pairs with black bristles; tibiae reddish brown with black apical portion, anterior and middle pairs, with long black and white hairs, the posterior pair with long black and white, and short yellowish brown hairs, bristles black; tarsi black with black hairs and bristles, and short orange hairs on the posterior side; claws black; pulvilli dark yellowish brown.

Wings hyaline, with a slightly yellowish brown tinge, veins dark reddish brown; costa slightly dilated, subcostal cell dark reddish brown



Porasilus intermedius, sp. n., ♂, genitalia: 13, ventral view; 14, dorsal view; 15, lateral view; 16, right wing.

in its distal half; second branch of third vein ends *above wing apex* (Fig. 16).

Female: Tergite 1 with 2 strong black bristles at each latero-posterior angle, tergite 7 shining black and costa not dilated.

Type-material: Holotype ♂, from Manaus, Amazonas, Brazil, 21.IX.1956 (Valle), 1 ♂ paratype, from Lago de Xiborema, Manaus, Amazonas, Brazil, 20.I.1956 (Elias & Roppa), 1 ♂ paratype, from Lago Jacaré, Rio Trombetas, Pará, Brazil, X.1969 (EPA) and 1 ♂ paratype, from Manaus, Amazonas, Brazil, 12.I.1956 (Elias), all in the Museu de Zoologia, Universidade de São Paulo.

TAXONOMIC DISCUSSION

The species of the genus *Porasilus* Curran present two tendencies more or less distinct: *barbiellini* and *satyrus* exhibit a long basistylus and a slightly longer dististylus; *lesbius*, *garciai* and *intermedius* a short and heavily set basistylus, and a dististylus clearly longer than the former. *Lesbius* may be considered as intermediate between these two groups. *Intermedius* presents some characters in common with the genus *Diplosynapsis* Enderlein, but until more material is available the synonymy between the two genera can not be proposed.

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