

NEW *Stylogaster* AND RANGES OF CONOPIDAE (DIPTERA) FROM THE BRAZILIAN AND BOLIVIAN AMAZONIA

Sidney CAMRAS¹, Philip P. PARRILLO²

ABSTRACT — Conopid flies from the collection of the Instituto Nacional de Pesquisas da Amazonia, Manaus, Brazil, are examined, of which two from Brazil are new, *Stylogaster rafaeli* from Rondônia and *S. ctenitarsa* from Roraima. This data, along with new material from Bolivia, expands the distributions of thirteen species of Conopidae. Figures for *S. rafaeli* sp.n. and *S. ctenitarsa* sp.n. are included.

Key words: Conopidae, new species, Amazon, distribution.

Novas *Stylogaster* e Distribuições de Conopidae (Diptera) da Amazônia Brasileira e Boliviana.

RESUMO — Foram examinadas moscas da família Conopidae da coleção do Instituto Nacional de Pesquisas da Amazônia, Manaus, Brasil. Duas espécies do Brasil são novas, *Stylogaster rafaeli* de Rondônia e *S. ctenitarsa* de Roraima. Estes dados, juntamente aos novos espécimes da Bolívia, ampliam as distribuições conhecidas de treze espécies de Conopidae. Incluímos figuras de *S. rafaeli* e *S. ctenitarsa*.

Palavras chaves: Conopidae, espécie nova, Amazônia, distribuição

INTRODUCTION

Since our last treatment of *Stylogaster* in 1985, more conopid material has become available for study from neotropical regions we have not previously examined. This material is particularly important in enabling us to test our earlier concepts of species and their diagnostic limits as well as furnishing new information about their distribution. The use of the malaise trap has singularly been the most important factor contributing to the collection of this material. This paper is based on specimens from the Instituto Nacional de Pesquisas da Amazonia (INPA) in Manaus, Brazil, and contains two new Brazilian species of *Stylogaster*, *S. rafaeli* from Rondônia and *S. ctenitarsa* from Roraima. *S. sousalopesi* Camras, from this collection, was described in a previous paper (CAMRAS, 1989). It was considered appropriate to include in this study specimens taken near Buena Vista, Bolivia

because this region represents the southernmost extension of the Amazonian forest and expands the ranges of the following thirteen conopids: *Physoconops (s.str.) peruviana*, *Stylogaster souzai*, *S. longispina*, *S. dispar*, *S. brasilia*, *S. rufa*, *S. rectinervis*, *S. banksi*, *S. jactata*, *S. lepida*, *S. decorata*, *S. peruviana*, and *S. plumidecorata*. These details will be discussed at length under the heading of each species below. Historical information on the known ranges of species were compiled from PAPAVERO (1971) and CAMRAS & PARRILLO (1985).

METHODS AND MATERIALS

156 Conopidae from INPA and 37 *Stylogaster* from the collection of S. Camras were examined with a Wild M8 Zoom stereo microscope. Illustrations were made using a dedicated drawing tube. Measurements were made from the base of the antennae to

¹ 4013 N. Milwaukee Avenue, Room 515, Chicago, IL 60641

² Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605

the apex of the abdomen in males and to the base of the ovipositor in females. Dissections of the male genitalia were made by removing the posterior portion of the abdomen and relaxing it in a solution of potassium hydroxide (1 chip per 1 ml of water) for 12 to 24 hours at room temperature. This procedure rehydrates and clears the abdomen for dissection and examination. The dissected portion was then returned to a glycerin-filled microvial and pinned with the corresponding specimen for permanent association.

It should be noted that the drawings of the surstyli capture these very three dimensional structures at specific viewing angles and observing them at other angles may make them appear quite different than what is shown in our figures.

The authors have adopted the morphological terms found in *Manual of Nearctic Diptera* since their paper in 1985.

The holotypes of new species will be deposited in the collection of the Instituto Nacional de Pesquisas da Amazonia (INPA), Manaus, Brazil. Paratypes will be deposited at INPA and the S. Camras collection (SCC).

RESULTS AND DISCUSSION

Physoconops (Aconops) costatus (Fabricius)

Conops costatus Fabricius, 1805:175.

Record: 1 ♀, Brasil, Amazonas, Manaus, I.VIII.55, N. Cerqueira (INPA). Previously recorded from

Colombia, Surinam and Brazil (Bahia). Specimens in the senior author's collection are from Brazil (Belém, Pará), Paraguay and Argentina.

Physoconops (s.str.) analis (Fabricius)

Conops analis Fabricius, 1805:175.

Records: 1 ♂, Brasil, Amazonas, Manaus, Cidade Universitária, VII.1979, J.A. Rafael (INPA). This specimen is atypical in having a black stripe on the face and cheek. Although this variation has been noted in *P. discalis* this is the first observation of it occurring in *P. analis*.

Known from USA (Texas) to Paraguay.

Physoconops (s.str.) nigromarginatus (Kröber)

Conops nigromarginatus Kröber, 1915:151.

Records: 2 ♂♂, Brasil, Amazonas, Manaus, Reserva Ducke, 28.IX.1981, I.X.1981, J.A. Rafael (INPA). 1 ♂, Brasil, Amazonas, 26 km N of Manaus, Reserva Ducke, 6.IX.1978, J. Arias & N. Penny, malaise trap (INPA).

Known from Mexico to Bolivia.

Physoconops (s.str.) peruvianus Camras

Physoconops peruvianus Camras, 1955:178

Previously known from the monotype female from Pucallpa, Peru.

Record: 1 ♀, Brasil, Amazonas, Manaus, Cidade Universitária, XI.1978, J.A. Rafael (INPA).

Physocephala bipunctata (Macquart)

Conops bipunctata Macquart, 1843:168.

Record: 1♀, Brasil, Amazonas, Manaus, Cidade Universitária, VIII.1979, J.A. Rafael (INPA).

Known from Ecuador to Paraguay.

Physocephala inhabilis (Walker)

Conops inhabilis Walker, 1849:672.

Record: 1♀, Brasil, Amazonas, Manaus, Cidade Universitária, VIII.1979, J.A. Rafael (INPA).

Known from Mexico to Argentina.

Zodion affine (Kröber)

Parazodion affinis Kröber, 1939:531.

Zodion affine (Kröber): Camras, 1953

Record: 1♂, Brasil, Amazonas, Manaus, Reserva Ducke, 09.X.1981, J.A. Rafael, em copa de árvore (INPA).

Known from Venezuela to Argentina.

Stylogaster souzai Monteiro

Stylogaster souzai Monteiro, 1960:111.

A member of the *stylata*-group, *S. souzai*, until now, has been known only from the holotype. Known from the states of Amapá and Pará in Brazil.

Record: 1♂, Brasil, Pará, Oriximiná, Rio Trombetas, Alcoa Miner, Monte Branco, 7.X.1982, J.A. Rafael, Arm. malaise (INPA).

Stylogaster longispina Camras & Parrillo

Stylogaster longispina Camras & Parrillo, 1985:115.

This member of the *stylata*-

group is diagnostic by the elongated styles of the aedeagus and large flat medial tooth of the hypandrium. A similar elongation of these styles has occurred in *S. rafaeli* sp. n. (q.v.) but they are markedly shorter. The presence of long aedeagal styles of the *ornatipes*- and *neglecta*-groups is probably a synapomorphy, while their occurrence in *S. longispina* is clearly a case of convergence. The phylogenetic relationship of style development in *S. longispina* and *S. rafaeli* is presently unknown. Previously known from Peru and Bolivia.

Record: 1♂, Brasil, Acre, 4 km NE de Rio Branco, 6-10.V.1981, Jorge Arias (INPA).

Stylogaster stylata (Fabricius)

Conops stylata Fabricius, 1805:177.

This is the only South American member of the *stylata*-group with pale procoxal setae. *S. stylata* has the broadest distribution of the genus found in Colombia, Ecuador, Brazil (Santa Catarina, Mato Grosso, Pará) Paraguay, and Argentina.

Records: 29 ♂♂, 17 ♀♀, Brasil: Pará, c. Araguaia, 19-31.I.1983, Armadilha de malaise, J.A. Rafael (INPA).

Stylogaster rafaeli, sp. nov.

(Figs. 1a, 1b, 1c, 1d, 1e and 1f).

Types: HOLOTYPE: ♂, Brasil, Rondônia, Ariquemes Rio Ji-Paraná, 28.X.1986, 09°44' S-61°52' W, J.A. Rafael, Arm. malaise (INPA). PARATYPES: 5 ♂♂, same data as holotype (INPA, SCC).

Diagnosis

With diagnostic characters of the *stylata*-group. Male immediately rec-

ognized by a hippocrepiform invagination of the hypandrium which is bordered circum-marginally by long black hairs on the fifth sternite.

Description

Head: Vertex dark brown. Frons similar in color to the vertex, becoming rufous anteriorly. Four proclinate frontal bristles, increasing in size anteriorly. Ocellar triangle equilateral in shape, pale, posteriorly fuscous. Ocellar tubercle black, ocelli circular, amber colored. Triangle proceeding to slightly beyond middle of frons. Two prominent post-ocellar bristles. Frontal lunule, facial ridges and parafacials pale yellow, with light-directional silky sheen. Facial ridge medially carinate. Eyes with anterior facets about three diameters larger than lateral facets. Basal antennomere yellow. Second antennomere basally pale, apical 0.67 olivaceous; setose dorsally, along medial face, and along anterior margin. Third antennomere rufous, dorso-apical quarter infuscated; subequal in length to second antennomere. Arista black. Proboscis basally pale, otherwise black, labella yellow. Postcranium cinereous, with pale occipital and post ocular setae.

Thorax: Typical color pattern of the *stylata*-group. Presutural scutum with pale yellow post-pronotal lobes (humeral cali). Medial area with dark brown vitta, which is paler along medial longitudinal axis. Laterad to this central vitta is a smaller circular vitta, confluent with the former basally. Chaetotaxy of presutural scutum: 1 notopleural bristle, postpronotal bristle absent. The postsutural scutum gener-

ally dark brown becoming olivaceous posteriorly. Central vitta continuous to scutellum, but narrower. Chaetotaxy of postsutural scutum: 1 supra-alar, 2 post-alar, and 1 dorsocentral. The scutellum is dark brown, olivaceous apically. 1 pair of scutellar bristles. The pleurae are generally pale yellow except for brown staining on the meso-anepisternum. Mediotergite dark brown, dorsally paler. Laterotergite brownish, ventrally dark brown behind halter. Chaetotaxy of pleurae: 1 proepisternal (which is pale except for the apex which is brown) and 1 meso-anepimeral.

Legs: All segments simple in form and pale yellow in color unless stated otherwise. Pro- and mesocoxae with black setae on anterior and posterior faces. Pro- and mesotibiae pale black setulae on dorsal surface, glabrous ventrally. Mesofemur with ablateral longitudinal row of long fine setae on apical half. Pro- and mesotibiae densely pale setose. Protibia with several long, flat setae at apical adlateral margin. Mesotibia black setulose adlaterally, pale setulose ablaterally. All tarsi simple. Protarsus black setulose dorsally. Probasitarsus with adlateral brush of pale, ventrally directed setae along its length. Plantar surface glabrous. Mesotarsus similar to protarsus except for the absence of basitarsal brush and is setulose on plantar surface except last tarsomere. Metacoxa brown with moderately granulate microsculpture giving it a dull sheen. Black setae on ventral margins. Metatrochanter ventrally with long black setae. Metafemur yellow with three brown

bands: prebasal, preapical, and apical; black setose, adlateral margin with long black setae on basal half. Metatibia yellow, with a brown stain at middle and dark brown at apex; black setulose. Metatarsus brown, black setulose. Wings hyaline, medial $_{1+2}$ vein broadly bowed toward ventral wing margin. Costal setulae long and semierect. Halter with base pale yellow, knob brown.

Abdomen: Tergites generally pale yellow with brown maculae and covered with black, decumbent setulae. Tergite 1 with lateral callosity bearing several black and white setae. Tergite 2 with dorsal macula broadly covering dorsum, wider along posterior margin. Anteriolateral margin lined with 5 to 7 black macrosetae. Tergites 3 and 4 with dorsal brown maculae narrower anteriorly, broadly yellow on anterolateral quarters. Tergite 5 broadly brown maculate above. Tergite 6 light brown.

Postabdomen: Epandrium yellow, with a circular brown macula on either side; lacking macrosetae. Hypandrium broadly hipocrepiform, circum-marginally lined with long black setae (Fig. 1a). Internal orifice of hypandrium medially emarginate (Fig. 1b). Cerci and surstyli pale (Figs. 1c, 1d and 1f). Aedeagus with moderately long styles (Fig. 1e).

Length: 7.5 mm.

Ecology: No data available on hosts or ecitonine associations.

Etymology: Named in honor of José Rafael, who collected the type series.

Discussion

The apomorphous elongated

aedeagal styles of *S. rafaeli* is doubtless a convergence as this species clearly belongs to the *stylata*-group. See discussion under *S. longispina*. Paratypes with less black on the tergites. Length: 5.5 - 7.0 mm. This species keys to *S. souzai* in CAMRAS & PARRILLO (1985) but is easily distinguished by the characters mentioned in the diagnosis. Figure 1 drawn from paratype.

Stylogaster dispar Camras & Parrillo

Stylogaster dispar Camras & Parrillo, 1985:112.

Records: 2 ♂♂, Brasil, Rondônia, Ariquemes Rio Ji-Paraná, 28.X.1986, 09°44' S-61°52' W, J.A. Rafael, Arm. malaise (INPA). 1 ♂, Pará, c. Araguaia, 15-31.I.1983, J.A. Rafael, Armadilha de malaise (INPA).

Previously known only from Peru and Ecuador.

Stylogaster brasilia Camras & Parrillo

Stylogaster brasilia Camras & Parrillo, 1985:113.

Records: 1 ♂, Brasil, Rondônia, Ariquemes Rio Ji-Paraná, 28.X.1986, 09°44' S-61°52' W, J.A. Rafael, Arm. malaise (INPA). 3 ♀♀, Brasil, Rondônia, Vilhena, 27.VII.1983, Leonete Bindá. Arm: malaise, mata; Polo Noroeste (blue label) (INPA).

Previously known from eastern Brazil (São Paulo, Rio and Bahia).

Stylogaster rufa Camras & Parrillo

Stylogaster rufa Camras & Parrillo, 1985:116.

Record: 1 ♂, Brasil, Rondônia, Ariquemes Rio Ji-Paraná, 28.X.1986,

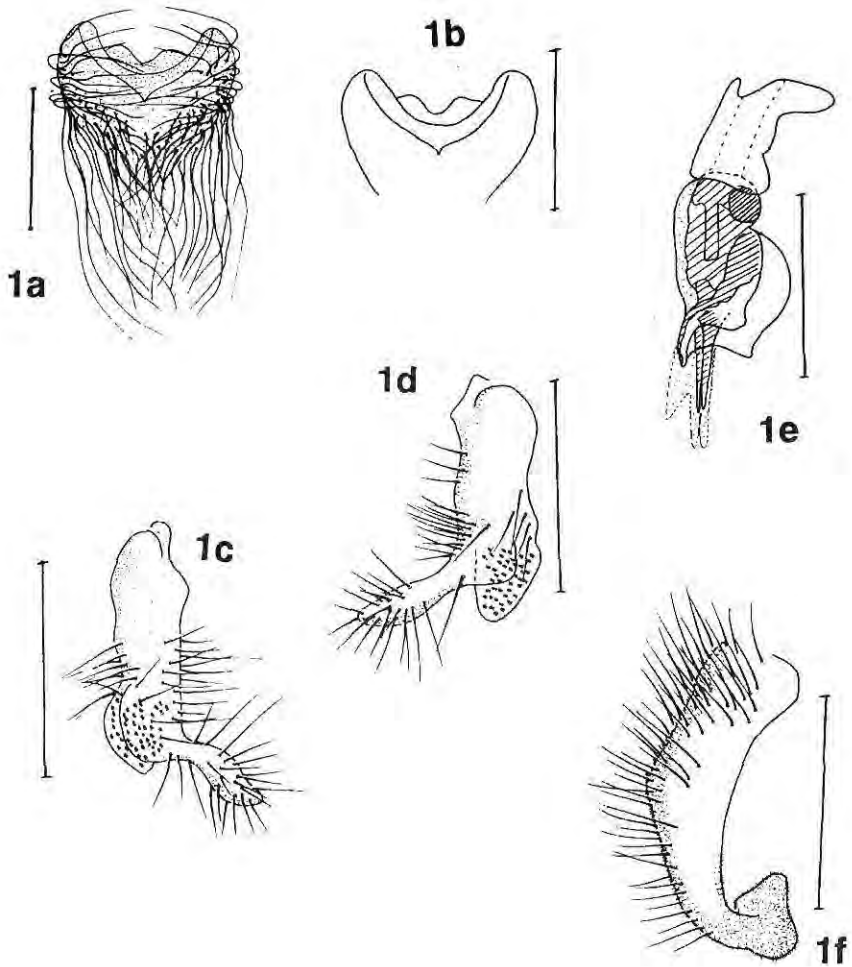


Figure 1. *Stylogaster rafaeli* sp. n. a) Hyandrium and fifth sternite; b) hyandrium; c) right surstylus; d) left surstylus; e) aedeagus; f) right cercus. The bar in all figures = 0.5 mm.

09°44' S-61°52' W, J.A. Rafael, Arm. malaise (INPA).

Previously known from the monotype male from Cuzco, Peru.

Stylogaster ctenitarsa, sp. nov.

(Figs. 2a, 2b, 2c, 2d, 2e and 2f).

HOLOTYPE: ♂, Brasil, Roraima, Pacaraima, 25.V-5.VIII.1988, Eq., J.A. Rafael, Armadilha de malaise (INPA).

Diagnosis

With all the diagnostic characters of the *rectinervis*-group, *S. ctenitarsa* is distinguished by ablateral, longitudinal row of hairs on the protarsus.

Description

Head: Vertex dark brown. Frons brown, becoming rufous anteriorly. Five proclinate frontal bristles, increasing in size anteriorly. Ocellar triangle equilateral in shape, pale, posteriorly brown. Ocellar tubercle black, ocelli circular, amber colored. Triangle proceeding to a little behind middle of frons. Three ocellar bristles present behind median ocellus; right side two, left, one (see discussion). Two prominent post-ocellar bristles. Frontal lunule, facial ridges and parafacials pale yellow, with light-directional silky sheen. Facial ridge medially carinate. Eyes with anterior facets about three diameters larger than lateral facets. Basal antennomere yellow. Second antennomere pale yellow, with uniform covering of sparse black setulae, less so on medial lateral face. Third antennomere yellow, apical half infuscated; subequal in length to second antennomere. Arista brownish, infuscated. Proboscis basally pale, otherwise blackish brown, labella yellow. Postcranium cinereous, with pale occipital and post ocular setae.

Thorax: Reduced macular pattern for the *stylata*-group. Presutural scutum pale yellow, except for insular curved brown macula, medial to post-pronotal lobes and extending almost to transverse suture. Central vitta evanescent. Chaetotaxy of presutural scutum: 1 notopleural bristle, 1 post-pronotal bristle. The postsutural scutum generally pale yellow, with a slight hint of a brown stain along the longitudinal axis of the supra-alar bristle. Chaetotaxy of postsutural scutum: 1 supra-alar, 2 post alar, and 1 dorsocentral (a smaller bristle also present in front of the dorsocentral). The scutellum is very light brown, with 1 pair of scutellar bristles. The pleurae are generally pale yellow except for brown crescent-shaped stain on the meso-anepisternum below the notopleural bristles and anterior to the wing base. Mediotergite and laterotergite yellow. Chaetotaxy of pleurae: 1 proepisternal (which are missing but indicated by setal sockets) and 1 meso-anepimeral.

Legs: All segments pale yellow unless stated otherwise. Pro- and mesocoxae with black setae on anterior and posterior faces. Pro- and mesotibiae simple in form, black setulate on dorsal surface, glabrous ventrally. Mesofemur with ablateral longitudinal row of long fine setae on apical 0.66. Pro- and mesotibiae densely pale setulose, with some black setulae on adlateral basal 0.20 of protibia and adlateral basal half of mesotibia. Pro- and mesotibiae with several long, flat, pale setae at apical adlateral margin. All tarsomeres simple in form. Probasitarsus pale setulose dorsally, the

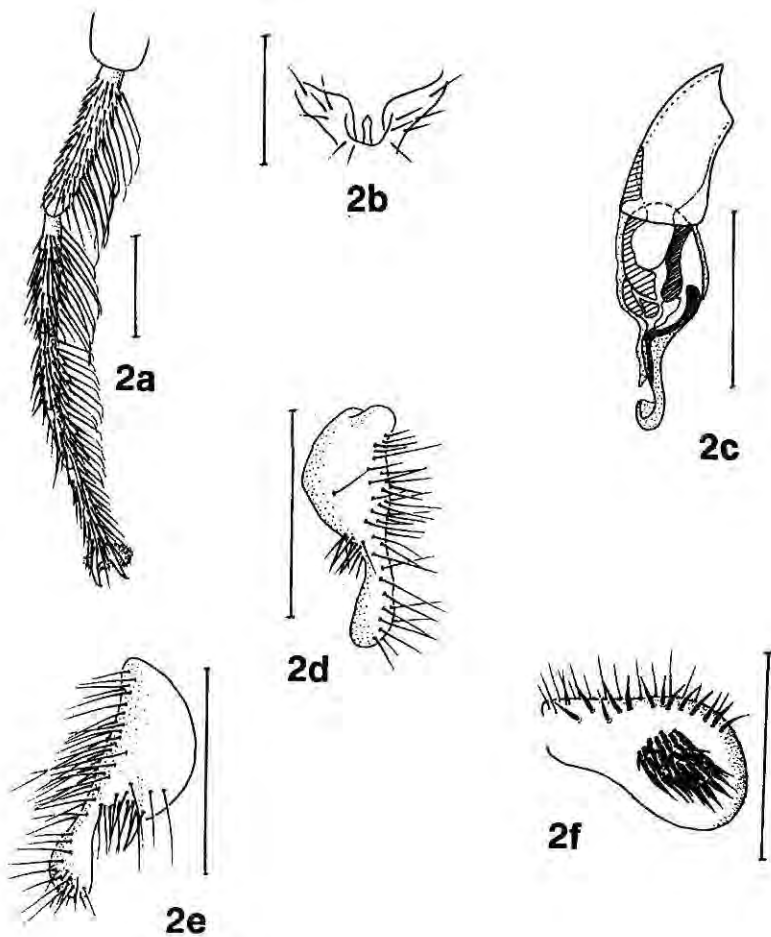


Figure 2. *Stylogaster ctenitarsa* sp. n. a) left protarsus; b) hypandrium; c) aedeagus; d) left surstylus; e) right surstylus; f) right cercus. - The bar in all figures = 0.5 mm.

remaining portions and other tarsomeres black setulose above. The plantar surfaces of protarsomeres glabrous. All protarsomeres with adlateral brush of short, pale, ventrally directed setae along its length. Immediately dorsal to this row of setae is another row of long pale setae which extend ablaterally to the longitudinal axis of the tarsus, forming a plumose tarsal comb, the length of the setae gradually diminishing toward the tarsal apex (Fig. 2a). Mesotarsus black setulose except for basitarsus, which is pale setulose adlaterally. Plantar surface also setulose. Metacoxa with strong granulate microsculpture, giving it a very dull sheen; with diagonal stripe (characteristic of *rectinervis*-group) present, but quite faint. Metatrochanter with dense field of long black setae on ventral face. Metafemur black setulose dorsally and on sides; with two brown bands, one prebasal and the other preapical. Adlateral surface with sparse brush of long black setae on basal half. Metatibia back setulose which decumbant basally and longer and erect toward the apex. Some white setulae at basal 0.33. Apex pale and with a preapical brown band. Metatarsus brown, black setulose. Wings hyaline, medial $_{1+2}$ vein straight. Costal setulae moderately long and semierect. Halter with base pale yellow, knob brown.

Abdomen: Tergites generally pale yellow with covering of black, decumbent setulae. Only with faint traces of triangular maculae. Tergite 1 with lateral callosity bearing several black setae. Tergite 2 with anteriolateral margin lined with 4 black macrosetae.

Postabdomen: Epandrium pale, lack-

ing macrosetae. Hypandrium with bulbous swelling on either side, externally with only a few black setae (Fig. 2b). Internal orifice ventrally U-shaped, internally with a long, narrow tooth (Fig. 2b). Aedeagus with long membranous lobe (Fig. 2c). Surstyli as in Figures 2d and 2e. Parameres produced as laminate lobes with proclinate rows of black setae. Cerci oval in outline with dorsal setae and central field of strong black setae (Fig. 2f).

Length: 8 mm.

Ecology: No data available on hosts or specific ecitonine associations.

Etymology: Named for the conspicuous protarsal brushes.

Discussion

This species belongs to the *rectinervis*-group and keys to *S. rufa* in CAMRAS & PARRILLO (1985), from which it may be distinguished by the pale mesonotum, a black macula near the humeral callosity and the long lateral hairs of the protarsus.

Stylogaster rectinervis Aldrich

Stylogaster rectinervis Aldrich, 1930:23.

Records: 1 ♂, Goiás, Araguacema, 26-29.I.1983, J.A. Rafael, Arm. malaise (INPA). 5 ♂♂, Pará, c. Araguaia, 19-31.I.1983, Armadilha de malaise, J.A. Rafael (INPA). 1 ♂, 1 ♀, Roraima, Rio Uraricoera, Ilha de Maracá, 05-15.X.1987, L.S. Aquino, Arm. malaise (INPA). 1 ♂, Brasil, Rondônia, Ariquemes Rio Ji-Paraná, 28.X.1986, 09°44' S-61°52' W, J.A. Rafael, Arm. malaise (INPA). 1 ♀, Brasil, Amazonas, Manaus, R. Ducke, 13.I.1982. J.A. Rafael, Arm. malaise (INPA). 1 ♀,

Brasil, Amazonas, 26 km N of Manaus, Reserva Ducke, 31.VIII.1982, J.A. Rafael, Arm. malaise (INPA). 1 ♀, Brasil, Amazonas, 26 km N of Manaus, Reserva Ducke, 24.IX.1982, J.A. Rafael, Arm. malaise (INPA). 2 ♂♂, 16 ♀♀, Bolivia, Santa Cruz, Ichilo, 25 km SW Buena Vista, "Cafetal", 6.VIII.1990, No.16, forest over ant raiding swarm, leg. P.P. Parrillo (SCC).

Previously known from Colombia, Ecuador, Peru and Brazil. Two of the males from the Brazilian material before us have relatively short costal hairs.

Stylogaster breviventris Aldrich

Stylogaster breviventris Aldrich, 1930:19.

Records: 1 ♂, Brasil, Amazonas, 26 km N of Manaus, Reserva Ducke, 24.IX.1982, J.A. Rafael, Arm. malaise (INPA). 1 ♀, Brasil, Amazonas, 26 km N of Manaus, Reserva Ducke, 20.IX.1982, J.A. Rafael, Arm. malaise (INPA). 2 ♂♂, 1 ♀, Brasil, Amazonas, Manaus, Reserva Ducke, 24.IX.1981, J.A. Rafael (INPA). 1 ♂, Brasil, Amazonas, Manaus, Reserva Ducke, 28.IX.1981, J.A. Rafael (INPA). 2 ♂♂, 2 ♀♀, Brasil, Amazonas, Manaus, Reserva Ducke, 23.XI.1981, J.A. Rafael (INPA). 1 ♂, Brasil, Amazonas, Manaus, Reserva Ducke, 15.III.1982, J.A. Rafael, Arm. malaise (INPA). 1 ♂, Brasil, Amazonas, Manaus, Reserva Ducke, 26.XI.1981, J.A. Rafael, Arm. malaise (INPA). 2 ♀♀, Brasil, Amazonas, Manaus, Reserva Ducke, 5.X.1981, J.A. Rafael (INPA). 1 ♀, Brasil, Amazonas, Manaus, Reserva Ducke, 13.I.1981, J.A. Rafael, Arm. malaise (INPA). 1 ♂, 1 ♀, Brasil, Amazonas, Manaus, Reserva Ducke, 1.X.1981, J.A. Rafael (INPA). 2 ♀♀,

Brasil, Amazonas, Manaus, Reserva Ducke, 9.II.1982, J.A. Rafael, em copa de árvore (INPA). 2 ♀♀, Brasil, Amazonas, Manaus, Reserva Ducke, 18.VI.1976, L. Albuquerque (INPA). 1 ♂, Brasil, Amazonas, Manaus, Reserva Ducke, 4.VI.1976, Paraluppi, (INPA). 1 ♂, Brasil, Amazonas, Manaus, Estr. Amazonas 1, km 54, 7.VII.1968, A. Faustina & E.V. Silva, # 2878 (INPA). 1 ♂, Brasil, Amazonas, Manaus, INPA, 1, 5.V.1976, Mario Dantas (INPA). 1 ♂, Brasil, Roraima, Serra Pacaraima, BV-8, 27.VIII.1987, J.A. Rafael, José Elias, A.L. Henriques, Armadilha de malaise (INPA). 1 ♀, Brasil, Pará, Oriximiná, Rio Trombetas, Alcoa Miner, 17-25.XI.1982, J.E. Bindá, Arm. malaise (INPA). 1 ♀, Brasil, Pará, Oriximiná, Rio Trombetas, Alcoa Miner, Cruz Alta, 14.X.1982, J.A. Rafael, Arm. malaise (INPA). 2 ♀♀, Pará, c. Araguaia, 19-31.I.1983, Armadilha de malaise, J.A. Rafael (INPA).

Previously know from Guyana, Brazil, Ecuador and Peru.

Stylogaster banksi Aldrich

Stylogaster banksi Aldrich, 1930:18.

Records: 1 ♀, Brasil, Amazonas, Manaus, Estr. Amazonas 1, km 79, "3-8-1968", E.V. Silva and A. Faustino, No. 2875 (INPA). 1 ♀, Roraima, Pacaraima, 5-8.III.1988, Eq. J.A. Rafael, Armadilha malaise, mata (INPA). 2 ♂♂, Rondônia, Vilhena, 27.VII.1983, Leonete Bindá, Arm. malaise, mata, Polo Noroeste (INPA). 1 ♂, Rondônia, Ariquemas, Rio Ji-Paraná, 28.X.1986, J.A. Rafael, Arm. malaise (INPA). 1 ♂, Bolivia, Santa Cruz, Ichilo, 25 km SW Buena Vista,

“Cafetal”, 6.VIII.1990, No.16, forest over ant raiding swarm, leg. P.P. Parrillo (SCC).

Previously known from Panama, Ecuador, Peru and Brazil (Amapá).

***Stylogaster fidelis* Monteiro**

Stylogaster fidelis Monteiro, 1960:107.

Record: 1♂, Rondônia, Ariquemes, Rio Ji-Paraná, 28.X.1986, J.A. Rafael, Arm. malaise (INPA).

Previously known from Brazil (Amapá), Venezuela and Peru.

***Stylogaster jactata* Lopes & Monteiro**

Stylogaster jactata Lopes & Monteiro, 1959:19.

Records: 16♂♂, 1♀, Bolivia, Santa Cruz, Ichilo, 25 km SW Buena Vista, “Cafetal”, 6.VIII.1990, No.16, forest over ant raiding swarm, leg. P.P. Parrillo (SCC).

Previously known from Brazil and Peru.

***Stylogaster lepida* Lopes & Monteiro**

Stylogaster lepida Lopes & Monteiro, 1959:11.

Record: 1♀, Bolivia, Santa Cruz, Ichilo, 25 km SW Buena Vista, “Cafetal”, 6.VIII.1990, No.16, forest over ant raiding swarm, leg. P.P. Parrillo (SCC).

Previously known from south-eastern Brazil. The male is necessary for more accurate identification.

***Stylogaster indistincta* Aldrich**

Stylogaster indistincta Aldrich, 1930:24.

Record: 1♂, Pará, Benevides, F. Norlândia, 14.XI.1986, J.A. Rafael,

Arm. malaise (INPA).

Known from Guatemala, Peru and Brazil (Santa Catarina).

***Stylogaster decorata* Aldrich**

Stylogaster decorata Aldrich, 1930:16.

Records: 1♂, Brasil, Amazonas, Rio Japurá, L. Amanã, IX.1982, R. Best (INPA). 1♂, Brasil, Amazonas, Manaus, R. Ducke, 9.II.1982, J.A. Rafael (INPA). 1♂, Pará, c. Araguaia, 19-31.I.1983, J.A. Rafael, Armadilha malaise (INPA). 1♀, Bolivia, Santa Cruz, Ichilo, 25 km SW Buena Vista, “Cafetal”, 6.VIII.1990, No.16, forest over ant raiding swarm, leg. P.P. Parrillo (SCC).

Previously known from Mexico to Peru and Brazil.

***Stylogaster pardecorata* Camras & Parrillo**

Stylogaster pardecorata Camras & Parrillo, 1985:121.

Records: 2♂, 18♀♀, Brazil (Roraima, Brasil, Amazonas, Pará and Goiás).

Known from Costa Rica to Peru and Brazil.

***Stylogaster* sp.**

Record: 1♀, Brasil, Amazonas, Manaus, R. Ducke, 2.II.1982. J.A. Rafael (INPA).

This specimen keys to the *ornatipes*-complex but the ovipositor is relatively short and the oviscapit different than what is normally seen in this group. The egg is also unusual in having a single pair of recurrent spines which are bifid.

***Stylogaster peruviana* Aldrich**

Stylogaster peruviana Aldrich, 1930:25.

Records: 5♂♂, 2♀♀, Pará, c. Araguaia, 19-31.I.1983, J.A. Rafael, Arm. de malaise (INPA). 3♀♀, Brasil, Pará, Benevides, F. Norlândia, 14.XI.1986, J.A. Rafael, Arm. malaise (INPA). 4♀♀, Brasil, Rondônia, Vilhena, 27.VII.1983, Leonete Bindá, Arm. malaise, mata, Polo Noroeste (INPA).

The males and some of the females have the hairs on the side of the first tergite white; therefore, the character of black hairs used to distinguish *S. peruviana* is no longer valid for this species.

Previously known from Peru and Ecuador

***Stylogaster plumidecorata* Camras & Parrillo**

Stylogaster plumidecorata Camras & Parrillo, 1985:122.

Records: 1♂, Goiás, Araguacema, 26-29.I.1983, 3♀♀, Brasil, Rondônia, Rio Ji-Paraná, 28.X.1986, J.A. Rafael, Arm. malaise (INPA).

The male is atypical in having part of the comb missing on the posterior margin of the mesotibia.

Previously known from Peru (Cuzco).

***Stylogaster amazonasi* Camras**

Stylogaster amazonasi Camras, 1963:825.

Records: 2♀♀, Brasil, Amazonas, Manaus, Estr. Amazonas 1, km 79, "3-8-1968", E.V. Silva and A. Faustino, No. 2875 (INPA).

Previously known only from the original five type females.

***Stylogaster souzalopesi* Camras.**

Stylogaster souzalopesi Camras, 1989:75.

Records: 3♂♂, Roraima, Rio Uricocoera, Ilha de Maracá, 05-15.X.1987, L.S. Aquino, Arm. malaise (INPA).

Holotype and paratypes.

***Stylogaster neglecta*-group**

Six specimens, from various localities in Brazil. These specimens do not conform to the descriptions of the known species of the *neglecta*-group, which is the least understood of the four species groups in neotropical *Stylogaster*. More material is needed for study.

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