

REVISION OF THE SUBFAMILY ROGENHOFERINAE STAT. NOV.
(DIPTERA, CUTEREBRIDAE)

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The subfamily Rogenhoferinae stat. nov. (Diptera, Cuterebridae) is revised. Two genera are recognized: Rogenhofera Brauer (Type-species, trigonophora Brauer) and Andinocuterebra Guimarães (Type-species, fassleri Guimarães). Five species are recorded in Rogenhofera, one R. lopesi is described as new. Key to species, illustrations and distribution are presented.

Key words: Rogenhoferinae stat. n. – *Rogenhoferia dasypoda* Brauer – *Rogenhoferia grandis* Guérin-Méneville
– *Rogenhoferia gilvopilosa* Bau – *Rogenhoferia trigonophora* Brauer – *Rogenhoferia lopesi* n. sp. –
Andinocuterebra fassleri Guimarães – Cuterebridae

The Rogenhoferinae are one of the most typical cuterebrid group of Neotropical Region. They are large and robust black flies. The group are myiasis producing Diptera, and their larvae develop mainly in the subcutaneous tissues of rodents and lagomorphs. In the present paper, the first on three contributions on the South American Cuterebridae, we study the subfamily Rogenhoferinae stat. nov. This subfamily occur only in South America and is represented by two genera, *Rogenhoferia* Brauer and *Andinocuterebra* Guimarães. Six nominal species of *Rogenhoferia* Brauer were recorded in the Catalogue of Neotropical Cuterebridae (Guimarães, 1967). In the present paper five species are recognized, *R. dasypoda* Brauer, *R. grandis* Guérin-Méneville, *R. gilvopilosa* Bau, *R. trigonophora* Brauer, and *R. lopesi*, sp. n.

Subfamily Rogenhoferinae, stat. nov.

Body stout and densely pilose. Eyes small. Frontal profile flat, not arcuate. Parafrontal calli absent. Front narrowed toward vertex in males, broad in females. Facial plate long, oval and shallow. Facial carina present. Bases of antennae largely separated; third article very short (about the combined length of first and second article). Arista bare (Fig. 1). Facialia densely covered with long hairs on lower half. Epistoma broad. Proboscis short. Legs moderately elongated; hind femora broad and short, densely pilose; tarsi not enlarged. Abdomen

oval, covered with abundant short and long hairs, but no bristles.

KEY TO THE GENERA OF ROGENHOFERINAE

1. Facial plate short and concave. Arms of facialia converging toward epistoma
. *Rogenhoferia*
- Facial plate elongate, flattened from bases of antennae to epistoma; arms of facialia subparallel toward epistoma
. *Andinocuterebra*

Rogenhoferia Brauer

Rogenhoferia Brauer, 1863a: 325 (1863b: 215, 217). Type-species *trigonophora* Brauer (mon.); Bau, 1932: 11 (chave); Townsend 1935: 223; Guimarães, 1967: 4 (cat.).

Rogenhoferia, emenda.

Guerinioestrus Townsend, 1931: 318. Type-species, *Cephenemyia grandis* Guérin-Méneville (orig. des.); Townsend, 1935: 223; Del Ponte, 1939: 527 (key do species).

KEY TO SPECIES OF ROGENHOFERA

1. Mesonotum black, covered with black hairs2
- Mesonotum black to testaceous, covered with yellow hairs.3
2. Epistoma broad, wider the facial carina; ocelli well developed. Abdomen covered with long and fine hairs; tarsi with fulvous

- hairs *dasyopoda* (Brasil, ES, RJ and SP)
 — Epistoma as broad as facial carina; ocelli vestigials. Abdomen covered with short hairs as in *Metacuterebra*. Tarsi with black hairs
 *lopesi* sp. n. (Brasil, GO)
 3. Abdomen with the last two segments dorsally covered with orange hairs. Mesonotum testaceous, covered with yellow or orange hairs *grandis* (Argentina)
 — Abdomen with last two segments dorsally covered with black hairs and few sparse yellow hairs 4
 4. Pteropleura, hypopleura, mesopleura and parafacialia covered with yellow hairs
 *gilvopilosa* (Peru)
 — Pteropleura, hypopleura, mesopleura and parafacialia covered with black and yellow hairs . . *trigonophora* (Brasil, BA, SP and RJ)

Rogenhofera dasyopoda Brauer
 (Figs 1, 2 and 4)

Rogenhofera dasyopoda Brauer, 1896: 272 (Type-locality, Brasil, Espírito Santo); Lutz, 1917: 100, pl. 28, fig. 8; Bau, 1928: 300.

Diagnosis — Mesonotum covered with black hairs. Ocelli well developed. Epistoma at base wider than facial carina. Abdomen black covered with few yellow hairs an T4 and T5.

Male — Head black. Front at vertex 0.23 of head width, covered with rare yellow hairs; ocelli well developed. Parafrontalia reddish brown, covered with black pile on upper half and yellow hairs near frontal calli. Parafacial calli shining and smooth, covered with few yellow hairs. Facial plate brown. Antennae reddish brown, arista testaceous. Parafacialia with long testaceous hairs on lower half. Genae shining brown. Genal calli swollen. Thorax brownish to black. Mesonotum and scutellum covered with short black hairs. Pleura covered with long black hairs. Legs brown; tarsi with reddish hairs. Coxae and trochanter III, with long yellow hairs. Abdomen brown, covered with fine black hairs dorsally and fine yellow hairs ventrally. T4 and T5 with sparse black and yellow hairs. Genitalia as in Figs 2 and 4.

Distribution — Brasil (Espírito Santo, Rio de Janeiro and São Paulo).

Material examined — Brasil, São Paulo, Eugênio Lefrève, Travassos, Lopes & Oiticica (1 male, Fundação Oswaldo Cruz).

Rogenhofera lopesi, sp. n.

Very similar to *R. trigonophora*, except by the larger front (0.50 of head width). Epistoma not broad ventrally, as wide as facial carina. Ocelli and parafacial calli vestigials. Female. Total length, 23 mm; wing length, 17 mm.

Front at vertex, 0,50 of head width, covered with yellow hairs near bases of antennae. Ocellar triangle with tuft of yellow hairs. Ocelli rudimentars. Parafrontalia black, covered with black hairs. Parafacial calli vestigials. Facial plate subcircular; facial carina straight. Epistoma as wide as facial carina. Antennae short, black; third segment, short and round, smaller than first and second segments combined. Genal calli elongate.

Mesonotum and scutellum dull, covered with short black pile. Scutellum with a tuft of black pile on apex. Pleura black, covered with long black hairs. Legs black; tarsi without reddish hairs ventrally. Wings dark brown. Calyptra black.

Abdomen dark brown, elongate, covered with short hairs, as described for typical *Metacuterebra*, with dump of yellow hairs at posterior border of T2 and T3. Abdomen without yellow hairs ventrally.

Holotype female, Brasil. Goiás, Parque Nacional das Emas, Campo Limpo, 10/24.viii. 1980, Anthony Raw col. (Museu de Zoologia, USP).

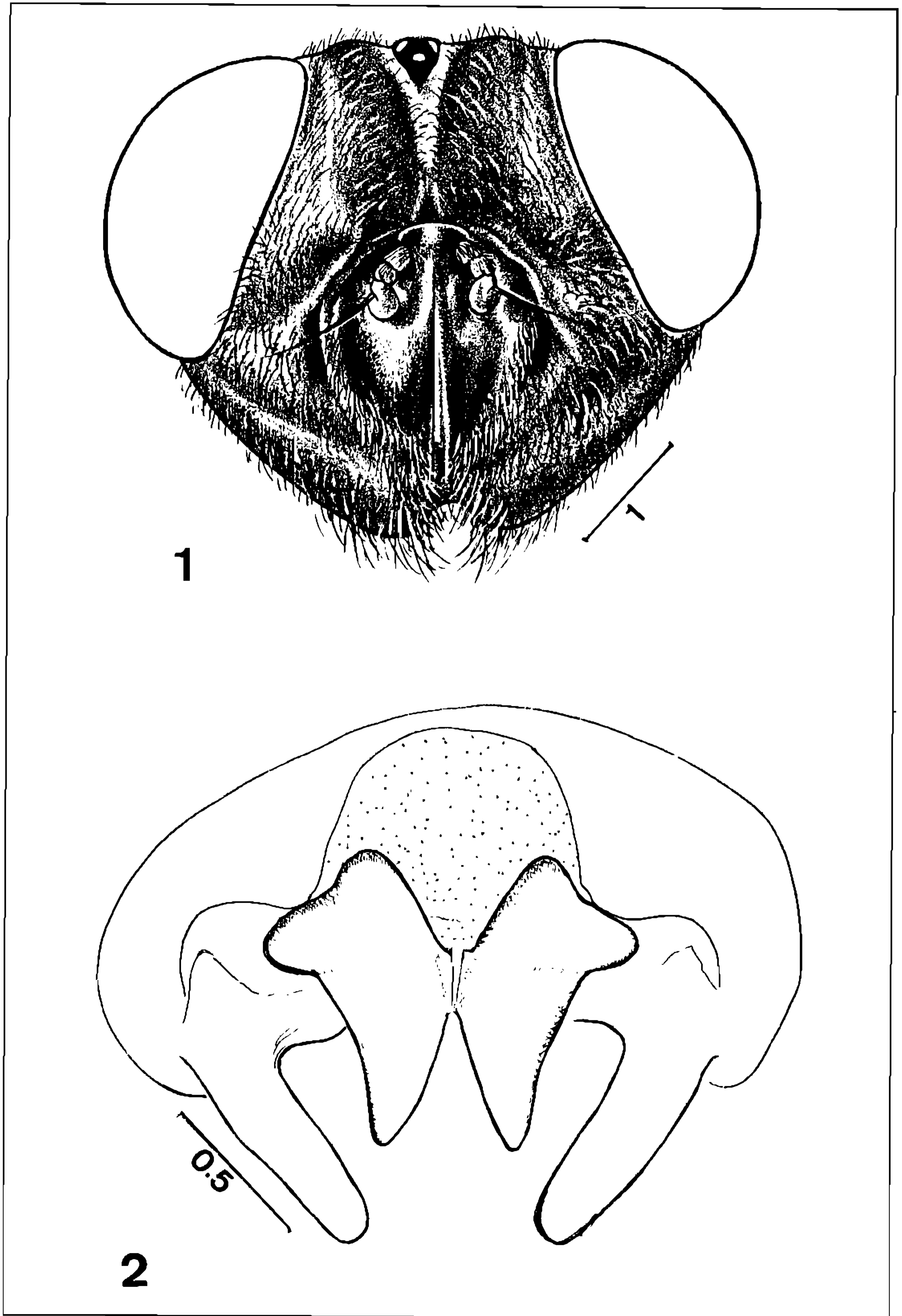
I take pleasure in naming this species in honor of my friend Prof. Dr. Hugo de Souza Lopes in commemoration of his 80th years of proficient work on Diptera.

Rogenhofera grandis (Guérin-Méneville)
 (Figs 3 and 6)

Cephenemyia grandis Guérin-Méneville, 1844: 548 (type locality, Argentina, Patagonia); Brauer, 1863b: 213; Bau, 1906: 24; Townsend, 1931: 318; Bau, 1932: 11; Del Ponte, 1939: 528.

Rogenhofera gilvopilosa Bau, 1932: 11 (type locality, Peru, Arequipa) N. syn.

Guerinioestrus bonaerensis Del Ponte, 1939: 529 (type locality, Argentina, Buenos Aires). N. syn.



Rogenhoferia dasypoda, female. Fig. 1: head, frontal view. Fig. 2: male. Cerci and surstyli (scale in mm).

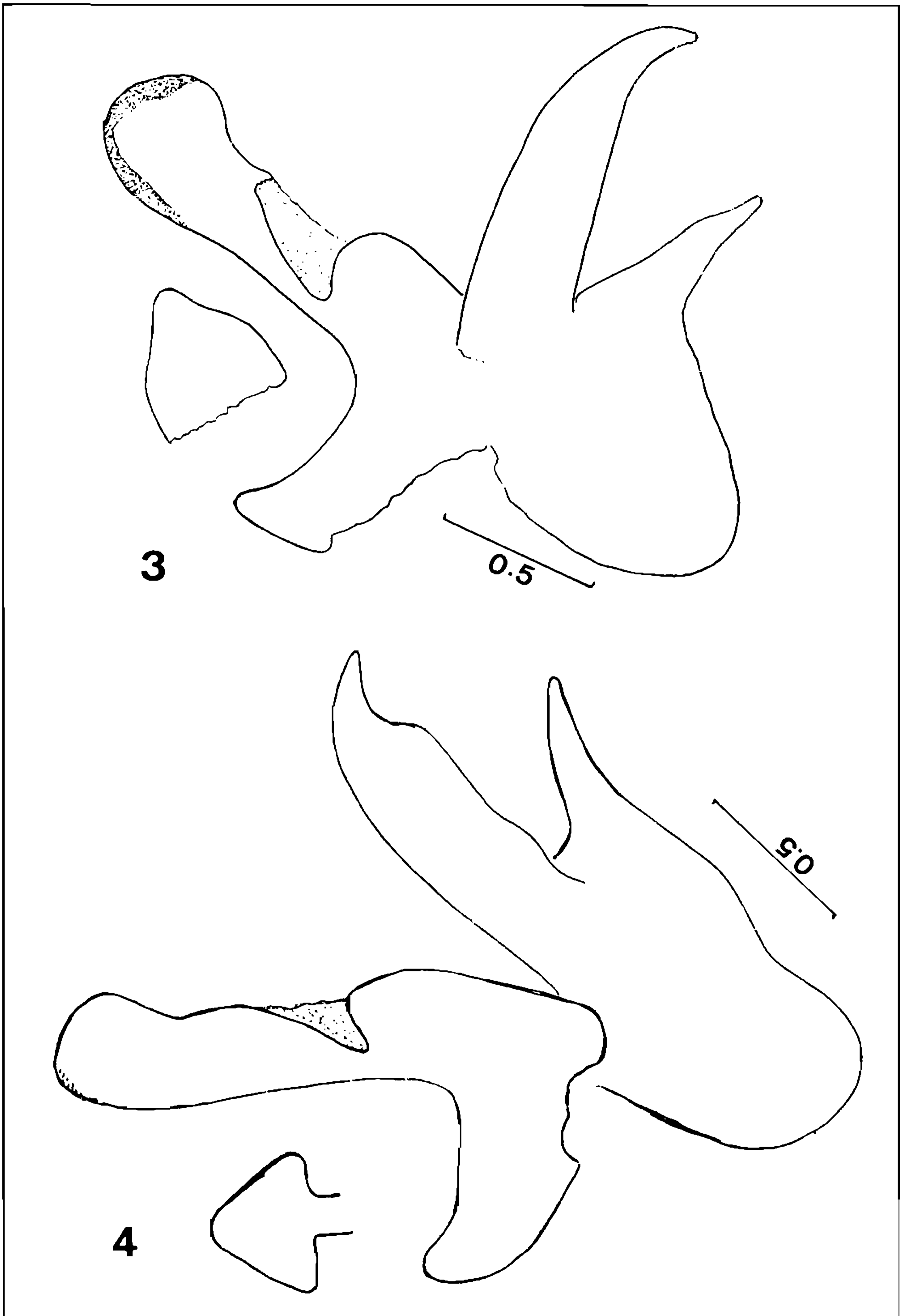


Fig. 3: *Rogenhoferia grandis*, male. Cerci and surstyli. Fig. 4: *Rogenhoferia dasypoda*, male. Cerci and surstyli (scale in mm).

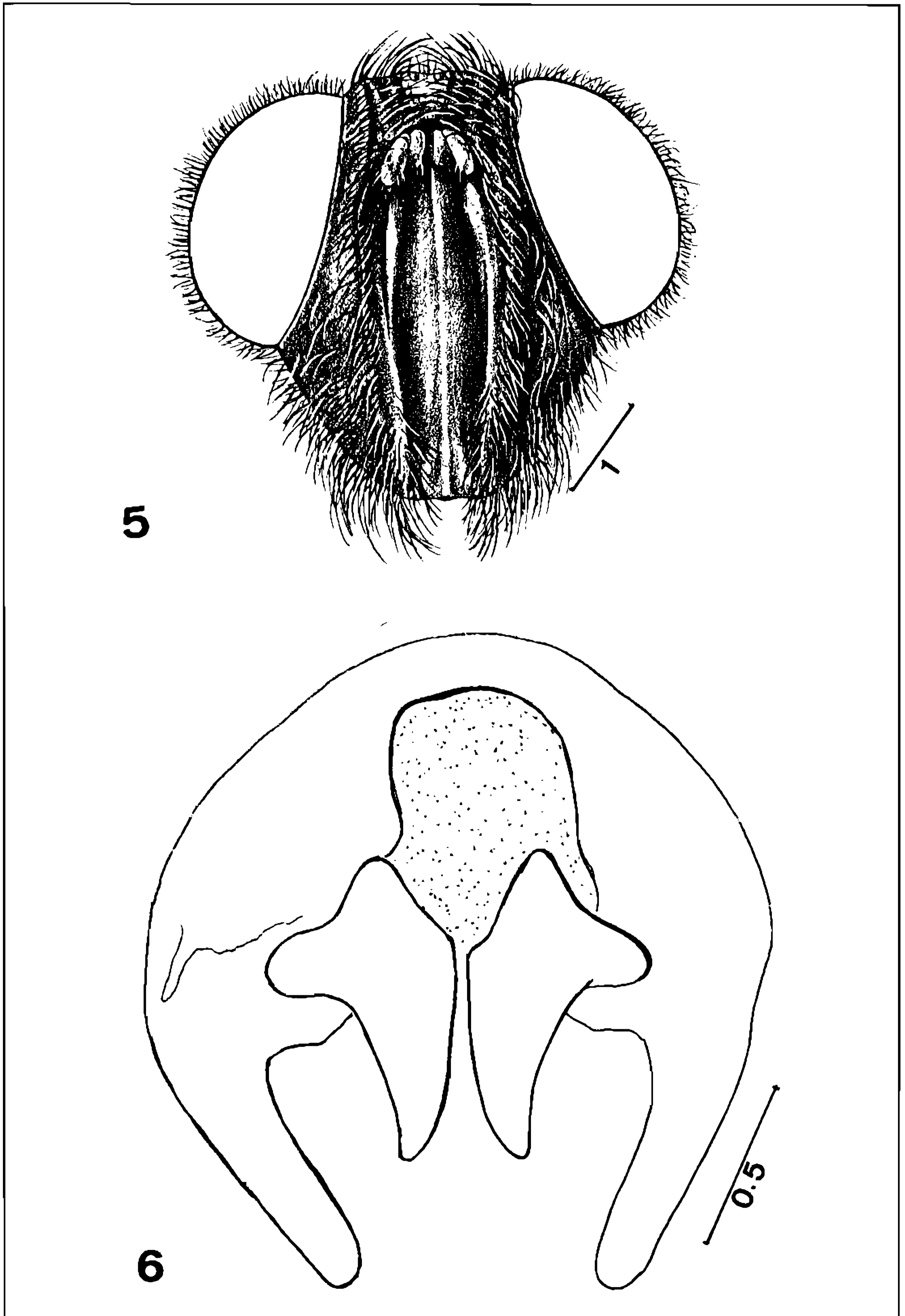


Fig. 5: *Andinocuterebra fassleri*, female. Head, frontal view. Fig. 6: *Rogenhoferia grandis*, male. Cerci and surstyli (scale in mm).

Guerinioestrus daguerrei Del Ponte, 1939: 530. (type locality, Argentina, Buenos Aires); Del Ponte, 1959: 575. N. syn.

Diagnosis – Head black. Mesonotum and scutellum reddish, with dense yellow hairs. Pós alar calli black haired. Abdomen with T1 2 and T3 black, covered with black hairs; T3 and T4 with long and dense fulvous hairs.

Male – Total length, 17 mm; wing length, 12.5 mm.

Female – Total length, 20 mm; wing length, 15.5 mm.

Frontalia black, covered with fine yellow hairs. Ocellar triangle not conspicuous, with well developed ocelli. Parafrontal calli shining black, with few yellow hairs. Facial plate and antennae black; aristae yellowish. Epistoma wide ventrally. Parafrontalia and genae black haired. Thorax black. Mesonotum and scutellum reddish, with cinereous microtomentum and covered with yellowish hairs. Notopleuron and pos alar calli black, covered with black hairs. Legs black; tarsi golden yellow pilose ventrally. Coxae III with yellow hairs on anterior side. Wings and lower calyptra dark brown. Abdomen black, covered with long black hairs. T4 and T5 dusted with grey tomentum, covered with long yellow hairs in dorsal side.

Male – Differs from female in the following characters.

Front at vertex 0.27 of head width. Epiphallus subtriangular in dorsal view (Fig. 3).

Distribution – Argentina.

Material examined – Argentina, no data (Holotype female of *R. bonaerensis*, Instituto Nacional de Microbiologia); Córdoba, Arguello, x.1957, F. H. Walz (1 male, Museu de Zoologia, USP); Buenos Aires, Mar Chiquita, 11.v.1983, O. Scaglia (1 male and 1 female, Museu de Zoologia, USP), (Ex *Reitodron physodes*); Córdoba, Calamuchuta, “El Salto”, M. J. Viana (1 female, Instituto Nacional de Microbiologia); Balcarce, Buenos Aires, 17.v.1978, C. Velazquez (1 female, Museu de Zoologia, US), (Ex *Akodon azarae*).

Rogenhoferia gilvopilosa Bau

Rogenhoferia gilvopilosa Bau, 1932: 11 (Type locality, Peru, Arequipa, Puno).

Female – Total length, 15 mm; wing length, 13 mm.

This species is similar to *R. grandis*, which it resembles in general appearance but it differs in the yellow-haired parafacialia. The type specimen presents the mesonotum bare, so we can not assure the color of pilosity of such area. Legs reddish brown, with few long hairs. Mesopleura and pteropleura with yellow and black hairs. Hypopleura densely yellow pilose. Abdomen with T 1 2 and T5 dorsally covered with long black hairs and few yellow hairs laterally.

Distribution – Peru.

Material examined – Peru, Arequipa, Puno, 16.ii.1902 (1 female, Staatliche Museum für Tierkunde, Dresden).

Rogenhoferia trigonophora Brauer

Rogenhoferia trigonophora Brauer, 1863a: 326; 1863b: 217, pl. 6, fig. 14; Pl. 10, fig. 5 (Type locality, Brasil, Bahia); Lutz, 1917: 10.

Diagnosis – Mesonotum covered with yellow pile. Ocelli well developed. Epistoma large at base. Abdomen black pilose, with few yellow hairs on T5.

Female – Total length, 22 mm; wing length, 12 mm.

Front at vertex 0,34 of head width. Frontalia black with fine black hairs near eye border. Parafrontal calli shining brown black and yellow pilose. Antennae reddish brown. Mesonotum covered with fine yellow hairs. Scutellum with long black hairs. Pleura and legs covered with black hairs; coxae III with few yellow hairs. Tarsi covered with golden hairs ventrally. Abdomen reddish brown, covered with short black hairs on dorsal and ventral side.

Male – Differs from female in the following characters.

Front at vertex 0.23 of head width. Mesonotum whitish microtomentose. Scutellum covered with black hairs and a tuft of yellow hairs on

apex. T4 and T5 covered with yellow and black hairs, with a polished triangular area on middle. Abdomen entirely covered with long yellow hairs ventrally.

Distribution – Brasil (Bahia, Rio de Janeiro and São Paulo).

Material examined – Brasil, Rio de Janeiro, Itatiaia, 1100 m, 20.xi.1926, J. F. Zikán (1 male, Fundação Oswaldo Cruz). São Paulo, Serra da Bocaina, 1650 m, xi.1969, Seabra & Alvarenga (1 female, Museu de Zoologia, USP).

Andinocuterebra Guimarães

Andinocuterebra Guimarães, 1984:23. Type-species, *fassleri* Guimarães (orig. des.).

Similar to *Rogenhofera* differing mainly by the flat and elongate facial plate. Facial carina absent. Facialia long, covered with long black hairs. Parafacialia narrow. Parafrontal and parafacial calli absent (Fig. 5).

Andinocuterebra fassleri Guimarães

Andinocuterebra fassleri Guimarães, 1989: 23 (Type locality, Colombia, Rio Aguacatal).

This species is known by the male type specimen. The antennae is broken and we have no information of the shape of arista.

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