# SARCOPHAGID FLIES (DIPTERA) FROM SINOP, STATE OF MATO GROSSO, BRAZIL

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In Sinop, State of Mato Grosso, Brazil, for the first time specimens of Euboett-cheria, with seven species, are dominant (54.39%) among the Sarcophagid flies. Two new species of Euboettcheria (alvarengai and roppai) and females of known species are described and figured. Notochaeta sinopi n.sp and Sinopiella rufopilosa n. gen., n. sp. are also described.

Ten. Cel. Moacyr Alvarenga and Olmiro Roppa obtained at Sinop (129 31 S, 550 37 W), Chapada dos Guimarães, about 350 m, always during the month of October of the years 1974 to 1976, 5910 specimens of Sarcophagidae belonging to, at least, 19 genera and approximately 44 species. Rocha e Silva & Aguiar, 1977, have given geographical references to Sinop.

The dominat genus in the region is Euboettcheria with seven species distributed in 3215 specimens (54.39% of all specimens collected). The commonest species of the genus is E. alvarengai n.sp., with 29.37% of the males of Euboettcheria. The commonest species in the region is Sarcodexia innota (Walker) with 1534 specimens (25.95% of all flies collected). Only 731 specimens, belonging to 6 species of Oxysarcodexia (12.36%) were obtained. No other studied region in Brazil has been observed with similar distribution of species. Lopes (1973) refering to flies collected in the state of Rio de Janeiro, found in Petrópolis (mountains with about 900 m), among 1173 specimens attracted by human feces, 19 species of Oxysarcodexia (81.27%) and 3 species of Euboettcheria, representing 1.04% of the total number of specimens. At sea level, Angra dos Reis, the same author obtained, using human feces, 13 species of Oxysarcodexia (61.91%) and 3 species of Euboettcheria (3.19%), among 1461 specimens. Attracted by bananas and sugar, in the same locality, he collected 472 specimens distributed in 13 species of Oxysarcodexia (68.79%) and a single species of Euboettcheria (1.05%). Lopes (1975) obtained in Pacatuba. State of Ceará, 1934 specimens of 12 species of Oxysarcodexia (69.94%) and 2 species of Euboettcheria (0.66%). Sarcodexia innota (Walker) was represented by 1.39% of the specimens.

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species of Euboettcheria (0,66%). Sarcodexia innota (Walker) was represented by 1,39% of the specimens.

We are unable to determine six species belonging to six different genera, represented by 14 females. We obtained females of all species except *Peckiamya minutipennis* (Hall), *P. expuncta* (Lopes) and *Sinopia rufopilosa* n. gen. n. sp.; some specimens of the unnamed females could belong to *Peckiamyia*, only female of *expuncta* is known to us, *S. rufopilosa* is very characteristic by its long pale hairs of gena.

### Nephochaetopteryx spp.

Nineteen females were found, 0.32% of all specimens examined.

### Emdenimyia korytkowskyi Lopes.

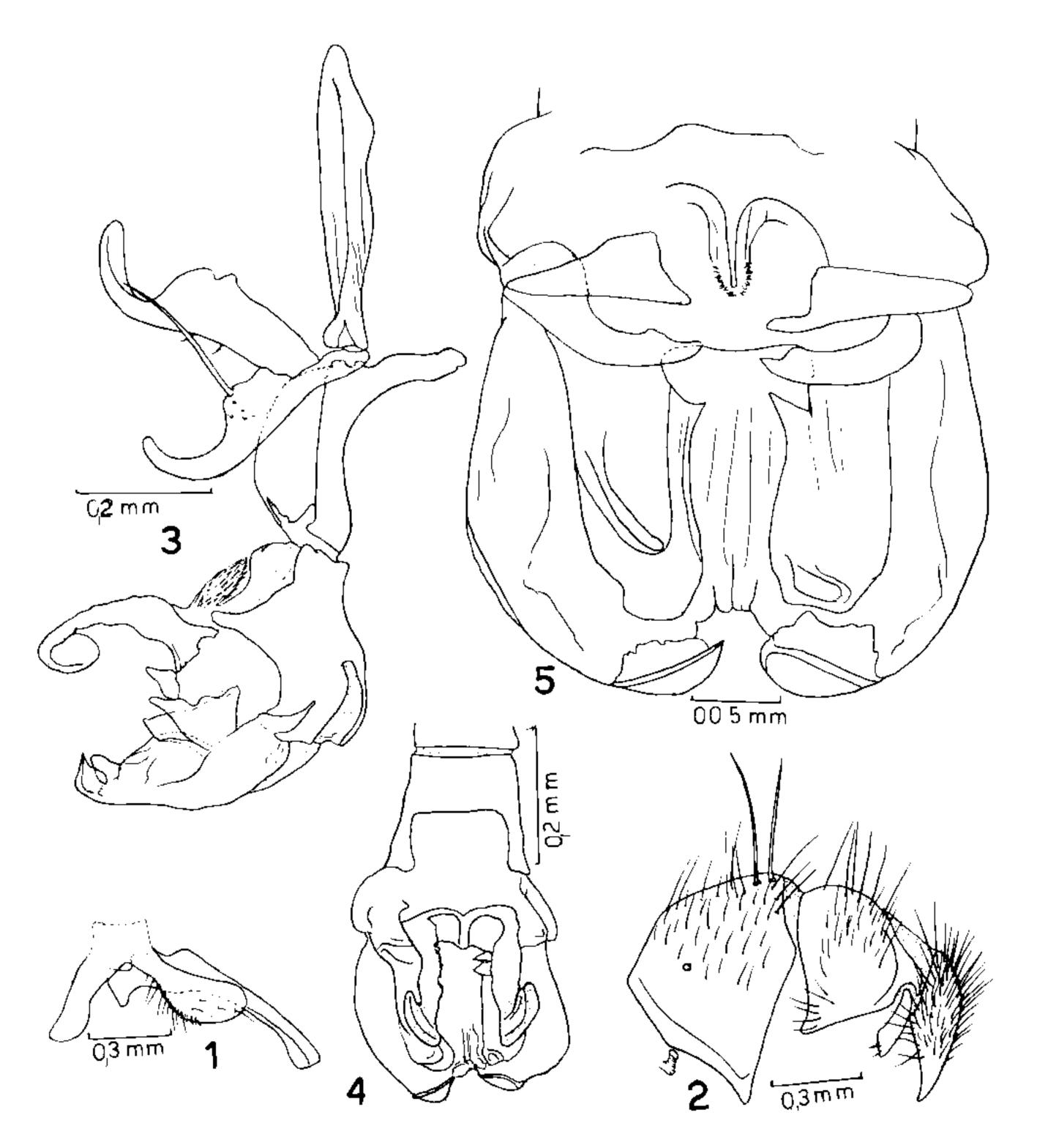
Nine males, 2 females were determined, 0.18% of the flies studied. Two more females of *Emdenimyia* belonging to two undetermined species were found.

## Notochaeta sinopi n.sp. (Figs. 1 to 5)

Male, length: 7.5 to 9.5 mm. Head pale yellow, frontalia gray to reddish gray, front about 0.14 of head 11-12 frontal bristles, superior two reclinate, reaching basal third of second antennal segment, three bristles inserted below base os antenna; reclinate frontorbital bristle with the size of superior frontals or a little smaller; outer vertical bristle scarcelly differentiated from post-ocullar setae; ocellar bristles slender, as long as outer vertical; back of head and gena with black hairs and some fulvous hairs around neck and below; cheek grooves brown or reddish brown but covered with yellow pollinosity; parafacialia about 0.42 of the distance between vibrissae, bearing small hairs near eyes; palpi reddish brown; antenna reddish brown, more intensly reddish on basal segments, reaching about 0.86 of the distance to vibrissa, second segment about 0.31 of third, arista long plumose almost to tip.

Thorax with yellowish gray pollinosity; acrostichal bristles absent, prescutellar moderate; two strong predorsocentrals, three strong post-dorsocentrals, anterior one somewhat reduced; 1:1 intralars; 1 very long supralar presutural, 3 post-supralar (median one very large); 3 marginal scutellars, middle one moderate; preapical scutellar small, no apicals; proepisternum with hairs on center, sometimes with few hairs; katepisternum with two strong bristles; one paratype with additional slender bristle near anterior one; meron with 6-7 bristles. Wings with brown and yellowish brown veins, R4-5 with hairs on basal 3/4 or more of the distance to transverse; costal spine scarcelly differentiated. Middle and hind tibiae with preapical ventral bristle.

Abdomen with sligthly yellowish pollinosity; median marginal bristle on fourth tergite very long, surpassing the hind margin of fifth tergite; abdominal sternites with short black hairs and a pair of slender bristles on hind margin of the sternites II to IV which are sometimes, absent; fifth sternite with rounded posterior arms, sixth large (Fig. 1); genital segments brown with yellowish gray pollinosity, first with 2-3 pairs of marginal bristles, some of them, sometimes dislocated dorsally; surstyli with few hairs (Fig. 2); paraphallus with a pair of hyaline windows dorsally; apical plate with two pairs of apical lobes, one of them with sharp point; lateral plates relatively small, ventralia elongated, median process conspicuous, with apical hairs, styli not observed (Figs. 3-5).



Notochaeta sinopi: n. sp., male. — Fig. 1: fifth stemite; fig. 2: genital segments; fig. 3: phallic organs; fig. 4: penis, ventral view; fig. 5: glans.

Female, length: 8 mm. Similar to male, front about 0.3 of head width, 8-9 frontal bristles, superior proclinate frontorbital bristle stronger than anterior one; outer vertical bristle about half the length of inner one; palpi strongly calvate; antenna reaching about 0.94 of the distance to vibrissa, second segment about 0.41 of third; parafacialia about 0.28 of the distance between vibrissae; preapical scutellar bristle and costal spine scarcely differentiated.

Holotype, 2 paratypes, males, 2 female paratypes, all collected in October, 1946. These specimens represent 0.08% of the specimens collected.

This species runs to N. augusta Aldrich, from Panamá, differing mostly by the different shape of apical plate and cerci and by the more elongate ventralia.

Besides N. sinopi n.sp. we found 4 females related to Notochaeta: one of them with 2 pairs of postacrostichals and a single proclinate frontorbital bristle; one with very large eyes, like Orodexia but with one prolinate frontorbital, small ocellars and genitalia constituted as that of Harpagopyga; one very near sinopi but with red genitalia and finally one 10 mm long and with two post-intralar bristles.

### Harpagopyga sp.

A single male in very bad conditions was found (0.016% of the specimens).

## Acanthodotheca alcedo (Aldrich)

One male, two females, 0.05% of the specimens studied. Male with 9.5 mm, abdomen gray, fifth tergite red, median marginal bristles of fourth tergite short and robust, sternite I with short dense hairs, II with long dense hairs and some bristled long hairs, III with moderate long hairs and some bristled hairs on hind margin, IV with short decumbent and long bristled hairs posteriorly, V sternite red.

## Ravinia belforti (Prado et Fonseca)

We found 133 specimens, 2.25% of all flies studied.

## Oxysarcodexia spp

731 specimens, belonging to six species, were found among the flies collected, 12.36% of all specimens; the commonest species of the genus was O. admixta (Lopes) with about half of the flies of the genus in the collection. The rarest species was O. thornax (Walker), one of the commonet species near Rio de Janeiro.

O. xanthosoma (Aldrich) with 37.2% of the species of Oxysarcodexia and 4.6% of all species observed. O. admixta (Lopes) with 48.29% of the specimens of the genus and 6% of all specimens studied. O. diana (Lopes) with 4.62% of th Oxysarcodexia and 0.57% of the specimens collected. O. major Lopes with 3.67 of the specimens observed and 0.45% of all specimens. O angrensis (Lopes) with 0.49% of the Oxysarcodexia and 0.66% of the specimens collected. Finally O. thornax (Walker) with 1.9% of the specimens of the genus and 0.23% of all specimens studied.

## Tripanurga albicans (Wiedemann)

Two males, 3 females were found among the material, 0.08% of the specimens studied.

## Neobellieria offecta (Lopes)

Three males, 5 females were obtained, 0.13% of the specimens collected.

## Sarcodexia innota (Walker)

This is the commonest species in the region, 1534 specimens were collected, 25.95% of all specimens obtained.

#### Paraphrissopoda spp

P. chrysostoma (Wiedemann) with only 0.23% of the flies collected and P. pexata (Wulp) with a single male.

### Euboettcheria spp.

3215 specimens, 1423 males and 1792 females were obtained; this number correspond to 54.39% of all flies collected.

The type species of Euboettcheria Townsend, 1927 is australis, proposed in the same paper, which is studied below for comparision with the species found in Sinop. All studied females present well sclerotized anal tergite, sometimes (australis) with a median constriction (Figs. 7, 8). Six species were found among the studied material, two of them considered as new species seems to be more or less restricted to the region: alvarengai n.sp., the commonest species is represented also in the collection of the Museu Nacional by a single male collected outside the region. We are unable to determine females of all species; only collusor, subducta and anguilla, obtained also from other regions, were studied and compared with australis, reared from dead spider found in Vassouras, State of Rio de Janeiro.

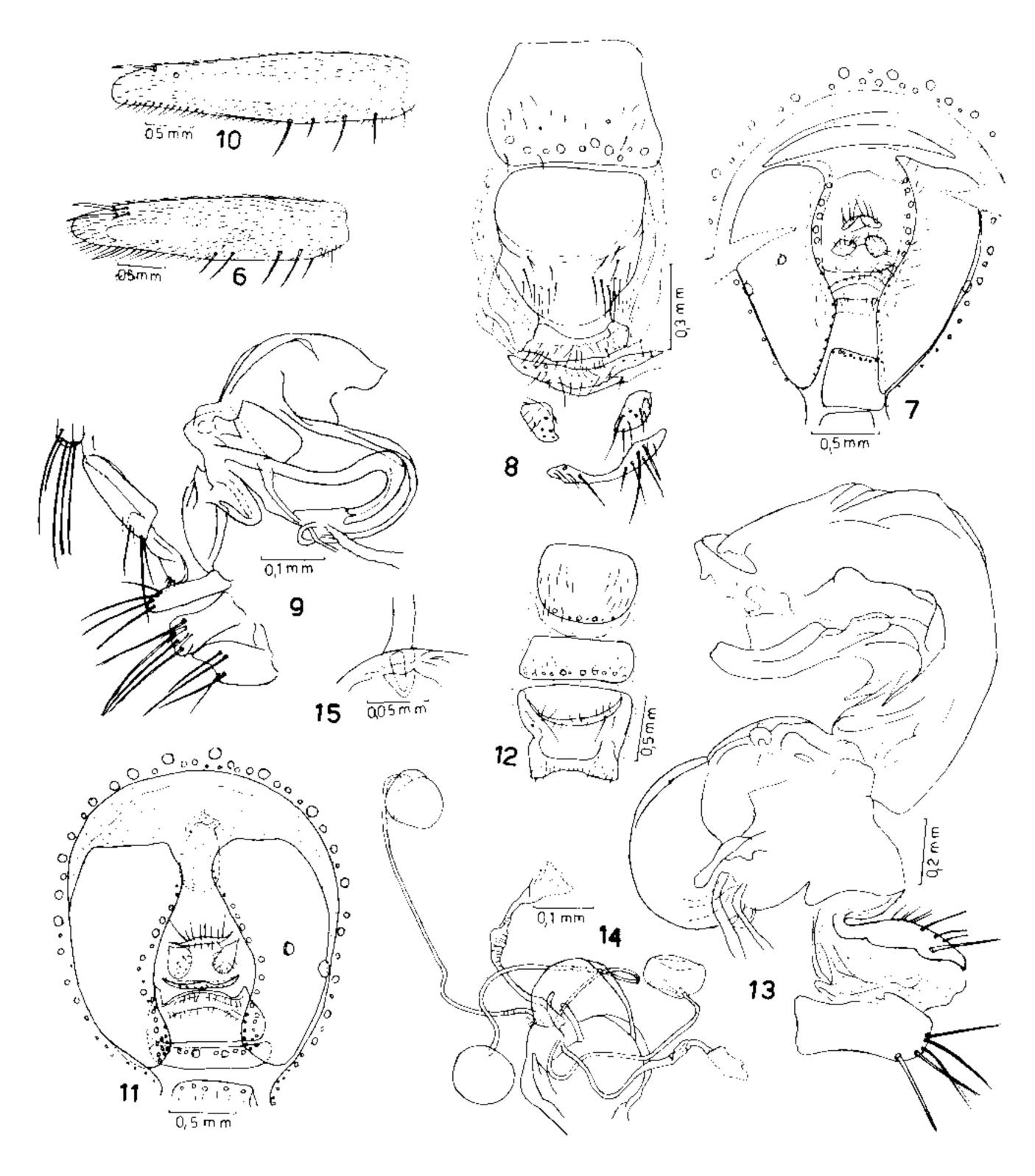
Boettcheria belongs to the Paraphrissopodina and is closely related to Peckia and Paraphrissopoda, showing a pair of very large plates representing the genital tergite, reduced post-dorsocentral bristles, elongate clypeal arch in the first stage larvae. Euboettcheria presents a cylindrical penis with elongate apical, lateral plates and styli, reduced ventralia, corresponding to a cylindrical signum in the females.

## Euboettcheria australis Townsend (Figs. 6 to 9)

Euboettcheria australis Townsend, 1927:306; Lopes, 1934:45, pls. 1-2 (paratype examined).

Male: 12 mm. Head, including posterior orbits, golden yellow; back of head and posterior gena yellowish gray; frontalia blackish gray, sometimes gray, reddish anteriorly; front about 0.21 of head width; 11-12 frontal bristles, anteriorly divergent, reaching a little below middle of second antennal segment; reclinate frontorbital bristles stronger than frontals; ocellar bristles small, with the size of outer vertical bristles which are scarcely differentiated from post-ocular setae; facial ridges with hairs on inferior half; cheek grooves pollinose; parafacialia with long hairs near eye, with about 0.62 of the distance between vibrissae; occiput with two rows of black hairs, pale hairs occupying also the postgena; gena mostly with black hairs having only few pale hairs near suture; antenna reddish gray, basal segments reddish brown, reaching about 0.85 of the distance to vibrissa, second segment about 0.43 of third; arista long plumose on basal 2/3.

Thorax gray, humeral region, anepisternum and anepimeron yellow; acrostichal bristles not differentiated, prescutellar moderate; some predorsocentrals scarcelly differentiated and one small bristle immediately before suture; a long and a moderate post-dorsocentrals besides some scarcely differentiated bristles anteriorly inserted; 2:2 intralars; 2:4-5 supralars; scutellum with 3 marginals, 1-2 pairs of scarcely differentiated preapicals, apical pair moderate, crossed; katepisternum with 3 bristles almost on same level; meron with 9-10 bristles; middle femur with conspicuous ctenideum, middle and hind femora and tibiae with long villosity. Wings with brown and yellowish brown veins R4-5 with hairs on basal 2/3 of the distance to crossvein.



Euboettcheria australis Townsend, female. – Fig. 6: middle femur, interior side; fig. 7: genitalia; fig 8: genital sternites; fig. 9: signum, lateral view.

Euboettcheria anguilla (C. et W.), female. – Fig. 10; middle femur, internal view; fig. 11; genitalia; fig. 12; genital sternites; fig. 13; signum, lateral view; fig. 14; spermathecae; fig. 15; duct of spermathecae.

Abdomen gray with slightly yellowish pollinosity, frequently hind margin of fifth tergite red; strong median marginals on fourth tergite; sternites II and III with long black dense hairs, second with bristled hairs; IV with short hairs and bristled hairs on hind margin: genital segments red, first with brown base, yellow pollinosity and 3-5 pairs of marginal bristles almost always slender; cerci reddish brown with black apices, curved forwards, bearing numerous spines, surstyli slender, reddish yellow with long hairs, forcipes interiores with preapical bristle, penis very long, cylindrical slender.

Female, differs from male as follows: front about 0.3 of head width; 9-10 frontal bristles, anterior proclinate as long as reclinate one, posterior proclinate smaller than others; ocellar bristles as long as strongest frontal; outer vertical bristle about 2/3 of inner one; four pairs of marginal scutellar bristles, no apical, 2-3 pairs of scarcely differentiated preapicals. Mid femoral organ of Fonseca (1953) reddish yellow, extending from a little before middle to behind the preapical bristles (Fig. 6); all sternites with sparse short black hairs and marginal bristles, second with discal bristles; syntergite VI-VII represented by a pair of large plates, covered with golden pollinosity, having a conspicuous dorsal membranous region between this syntergite and the fifth tergite which is reddish or blackish, without pollinosity (Fig. 7); sternite VIII longer than broad, with a conspicuous concavity, sternite IX well individualized, with hairs (Fig. 8); spermathecae spherical; signum well sclerotized (Fig. 9).

Descriptions based on specimens reared from dead spider, Vassouras, State of Rio de Janeiro, III-1971, M. Kroeff. Distribution: Brazil (Rio de Janeiro, São Paulo, Santa Catarina, Rio Grande do Sul); Paraguay, Argentina.

Euboettcheria anguilla (Curran et Walley) (Figs. 10 to 15)

Sarcophaga anguilla Curran et Walley, 1934:484, Fig. 36.

Euboettcheria anguilla Lopes, 1976:637, Figs. 38-40 (female).

Female, differs from australis as follows: front about 0.28 of head width, antenna reaching about 0.88 of the distance to vibrissa, second segment about 0.34 of third, parafacialia about 0.56 of the distance between vibrissae, only some anterior hairs of gena black, mostly of genal hairs pale; middle femoral organ very much elongated, from base of femur to proximal preapical bristle (Fig. 10); fifth tergite frequently reddish, covered with golden pollinosity, rest of abdomen only yellowish pollinose; syntergite VI-VII with same color of fifth tergite, membrane between syntergite and fifth tergite red, without pollinosity, sternite VIII broader than long, with conspicuous concavity and some hairs, sternite IX with small hairs (Figs. 11, 12); signum very large and well sclerotized (Fig. 13); spermatheca spherical, with long, slender conducts (Fig. 14), which present internal projection (Fig. 15). Description based on females from Linhares, State od Espírito Santo, P. C. Elias, VI. 1972.

Only 17 specimens were obtained, 1.19% of all males studied. Distribution: Trinidad, Panama, Ecuador, Colombia, Guyana, Brazil (Ceará, Mato Grosso, Rio de Janeiro, Espírito Santo, São Paulo), Argentina.

Euboettcheria subducta (Lopes). (Figs. 16 to 21)

Sarcophaga subducta Lopes, 1935:41, Figs. 6, 7.

Female, differs from australis as follows: front about 0.27 of head width, antenna reaching about 0.94 of the distance to vibrissa, second segment about 0.32 of third; parafacialia about 0.37; some hairs of gena, near sature, pale; middle femural organ very slender, from well before middle to the level of preapical bristle (Fig. 16); fifth tergite black, slightly yellowish gray pollinose; syntergite VI-VII reddish brown, covered with yellow pollinosity; sternite IX united to synsternite VI-VII having a concavity on posterior half, both sternites without hairs (Figs. 17, 18). Signum relatively small, well sclerotized (Fig. 19).

First stage larvae with 2.68 to 3.09 mm. long; first thoracic segment with a broad band os spines anteriorly and marginal spines on following segments which are more densely disposed ventrally; maxillae poorly curved, mandible conspicuous, hypopharyngeal sclerite entirely incorporated to paraclypeal phragma (Figs. 20, 21).

Descriptions based on specimens collected in Linhares, State of Espírito Santo, P. C. Elias, XI. 1972.

278 males collected at Sinop, 16.09% of all males obtained. Distribution: Brazil (Rio de Janeiro, Mato Grosso, Espírito Santo, Pernambuco), Ecuador.

Euboettcheria florencioi (Prado et Fonseca) (Figs. 22 to 25)

Ctenoprosballia florencioi Prado et Fonseca, 1932: 36, Fig. 2.

Euboettcheria florencioi Lopes, 1976. 637, Figs. 35-37 (female).

Female, front about 0.3 of head width; antenna reaching about 0.87 of the distance to vibrissa, second segment about 0.37 of third; parafacialia about 0.42 of the distance between vibrissae; all hairs of gena black; thorax yellow pollinose, rarely grayish on center of mesonotum; abdomen mostly with gray pollinosity; middle femural organ from before middle to behind preapical bristles (Fig. 22), syntergite VI-VII brownish black or reddish black, with gray pollinosity; sternite VIII longer than broad, sternite IX well separated, both without hairs (Figs. 23, 24); signum well sclerotized, accessory glands conspicuous, duct of spermatheca becaming slender distally (Fig. 25).

Description based on specimens from Nova Teutonia, Santa Catarina, F. Plaumann. 235 specimens were collected in Sinop, 16.31% of all males. Distribution: Ecuador, Brazil (Mato Grosso, Rio de Janeiro, Espírito Santo, São Paulo, Santa Catarina), Argentina.

Euboettcheria collusor (Curran et Walley) (Figs. 26 to 30)

Sarcophaga collusor Curran et Walley, 1934: 485, Fig. 45.

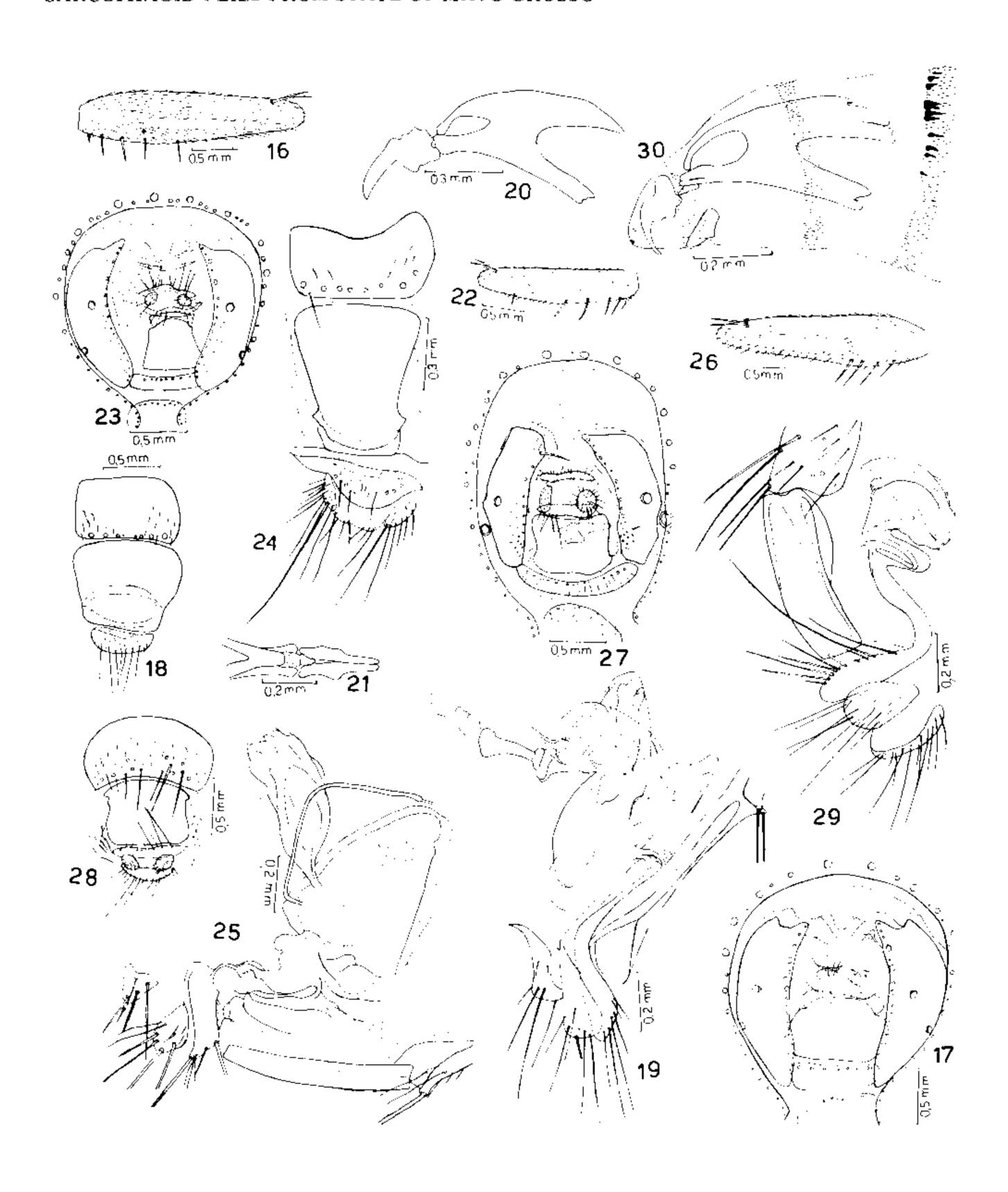
Female, front about 0.27 of head width, antenna reaching about 0.86 of the distance to vibrissa, second segment about 0.34 of third, parafacialia about 0.55 of the distance to vibrissae; some posterior hairs of gena, near suture, pale; fifth tergite somewhat reddish; abdominal pollinosity yellow; syntergite VI-VII and membrane between it and fifth tergite covered with yellow golden pollinosity; sternite IX united to sternite VIII, a little broader than long, bare; some bristled hairs are present on membrane near sternites and anal segment (Figs. 27, 28), signum small, well sclerotized (Fig. 29).

First stage larvae with 2.95 to 3 mm long, with slender spines on anterior margins of the segments, a ventral and sclerotized plate conspicuosly pigmented on anterior margin of first segment; anterior margin of third segment with large black spines; maxillae slender apically, hypopharyngeal sclerite well delimited; clypeal arch elongate, reaching paraclypeal phragma (Fig. 30).

191 males, 13.42% of the males collected. Distribution: Trinidad, Honduras, Panamá, Colombia, Bolivia, Ecuador, Brazil (Pernambuco, Ceará, Mato Grosso, Rio de Janeiro, Paraná, Santa Catarina), Argentina.

Euboettcheria epimelia (Lopes)

Sarcophaga epimelia Lopes, 1938: 284, pl. 2, Figs 3-4.



Euboettcheria subducta (Lopes), female. — Fig. 16: middle femur, internal side; fig. 17: genitalia; fig. 18: genital sternites; fig. 19: signum, lateral view. First stage larva. — Fig. 20: cephalopharyngeal skeleton, lateral view; fig. 21: idem, dorsal view. Euboettcheria florencioi (P. et F.), female. — Fig. 22: middle femur, internal side; fig. 23: genitalia: fig. 24: genital sternites; fig. 25: signum, lateral view. Euboettcheria collusor (C. et W.) female. — Fig. 26: middle femur, internal view; fig. 27: genitalia; fig. 28: genital sternites; fig. 29: signum, internal side. First stage larva. Fig. 30: anterior end, lateral view.

279 males were examined, 19.6% of all males of Euboettcheria collected. Distribution: Brazil (São Paulo, Mato Grosso, Pernambuco).

## Euboettcheria alvarengai n.sp. (Figs. 31 to 35)

Male, length: 9 to 12 mm. Differs from australis as follows: head pale yellow; 12-13 frontal bristles; front about 0.19 of head width; posterior third of gena or less, with pale hairs; cheek grooves brown with faint pollinosity; antenna reaching about 0.88 of the distance to vibrissa; second segment about 0.35 of third; parafacialia about 0.46 of the distance between vibrissae.

Thorax with predorsocentrals and preapical scutellar bristles more developed; scarce villosity limited to hind pair of legs and base of middle femur.

Abdomen with yellow pollinosity; hind margin of fifth tergite not red; second sternite with few long hairs and slender bristles ond disc; third and fourth sternites with short hairs; genital segments small, red; first blackish on base with dorsal yellow pollinosity limited to apical third, with long marginal hairs but no bristles; cerci almost straigth with preapical ventral conspicuous long spines (Figs. 31, 32), sternite IX reduced, forcipes interiores with preapical long bristle; palpi genitalium very characteristic, apically folded; penis tubular, apical plate long, divergent arms with apical small spophysis, ventralia very much reduced, styli long and slender (Figs. 33 to 35).

This species is different from the other species of the genus especially by the preapical long spines of œrci.

Holotype, 417 paratypes, 29.37% of the males collected on October 1974, 1975 and 1976, Sinop, Mato Grosso; 3 males, Vera, South of Sinop, X. 1973, all collected by Alvarenga & Roppa; one male Calado, Rio Doce, Minas Gerais, 12-15.II. 1939, A. V. Martins & H. S. Lopes.

## Euboettcheria roppai n. sp. (Figs. 36 to 42)

Male, length: 9 to 12 mm. Differs from australis as follow: front about 0.22 of head width, gena with 2-3 rows of pale hairs postariorly, near suture; antenna reaching about 0.81 of the distance to vibrissa, second segment about 0.33 of third; parafacialia about 0.52 of the distance between vibrissae.

Thorax with prescutellar bristles strong, 2:3-4 supralars; hairs of femur and tibiae moderate.

Abdomem with yellowish gray pollinosity; no reddish hind fifth; sternites I and II with some moderate long hairs, III and IV almost bare, with few marginal hairs, fifth sternite largely cleft with few hair (Fig. 36); genital segments red, six tergite with conspicuous plates bearing small bristles, first with yellow pollinosity and, sometimes, with 2 pairs of slender bristles; cerci elongate, slender, curved forwards and, apically, inwards, with slender ventral spines, surstyli with long hairs (Figs. 37 - 39) apical plate of paraphallus represented by a pair of slender plates, lateral plates and ventralia reduced, the first with hairs; styli moderately long (Figs. 40 - 42).

Holotype and 53 paratypes, males (3.79%) from Sinop, X.74, X.75.

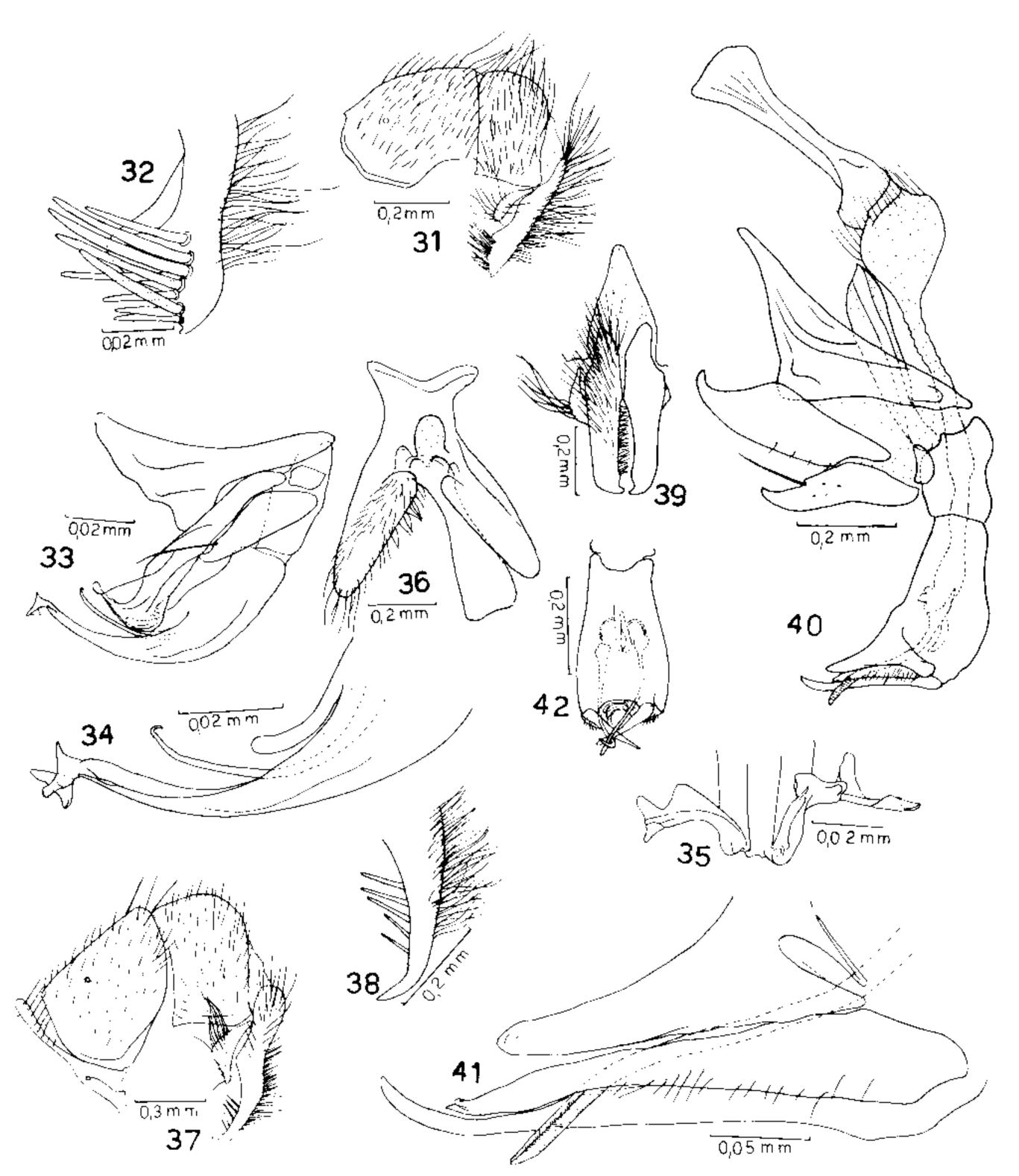
Adiscochaeta ingens (Walker)

46 specimens, 0.77% of all flies examined

Engelimyia ionops (Walker)

98 specimens, 1.65% of all flies studied.

### Pattonella ssp



Euboettcheria alvarengai n. sp., male. – Fig. 31: genital segments; fig. 32: apex of cercus, fig. 33: phallic organs; fig. 34: apex of penis, lateral view; fig. 35: idem, ventral view. Euboettcheria roppai n. sp., male. Fig. 36: fifth sternite; fig. 37: genital segments; fig. 38: apex of cerci; fig. 39: cerci, posterior view; fig. 40: phallic organs; fig. 41: apex of penis, lateral view; fig. 42: idem, ventral view.

### Pattonella ssp

P. intermutans (Walker) with 4 males, 10 females (0.23%). P. smarti Lopes with male and 3 females (0.06%).

### Helicobia sp

Only 2 females (0.03%) were found among the flies examined.

#### Peckiamyia spp

Only one male of P. expuncta (Lopes) and one male of P. minutipenis (Hall) were present among the material colected.

### Sinopiella n. gen.

Head mostly with pale hairs, genal suture very faint; paravertical setae slightly convergent, conspicuously longer than post-ocular setae: arista long plumose almost to tip: preacrostichal bristles not differentiated; predorsocentrals small; 2 strong postdorsocentral (posterior one very long) and 2 scarcelly differentiated bristles; post-alar wall with hairs; middle femur with ctenideum; abdominal sternites with pale hairs; fifth sternite largely cleft with conspicuous flat, posteriorly quadrangular apophysis; surstyli with exceeding long tuft of hairs; forcipes interiores very large, penis reduced, like *Peckiamyia*, lateral and apical plates fused to paraphallus, ventralia conspicuous, represented by a pair of sclerotized arms, styli and median process tubular.

### Type-species rufopilosa n. sp.

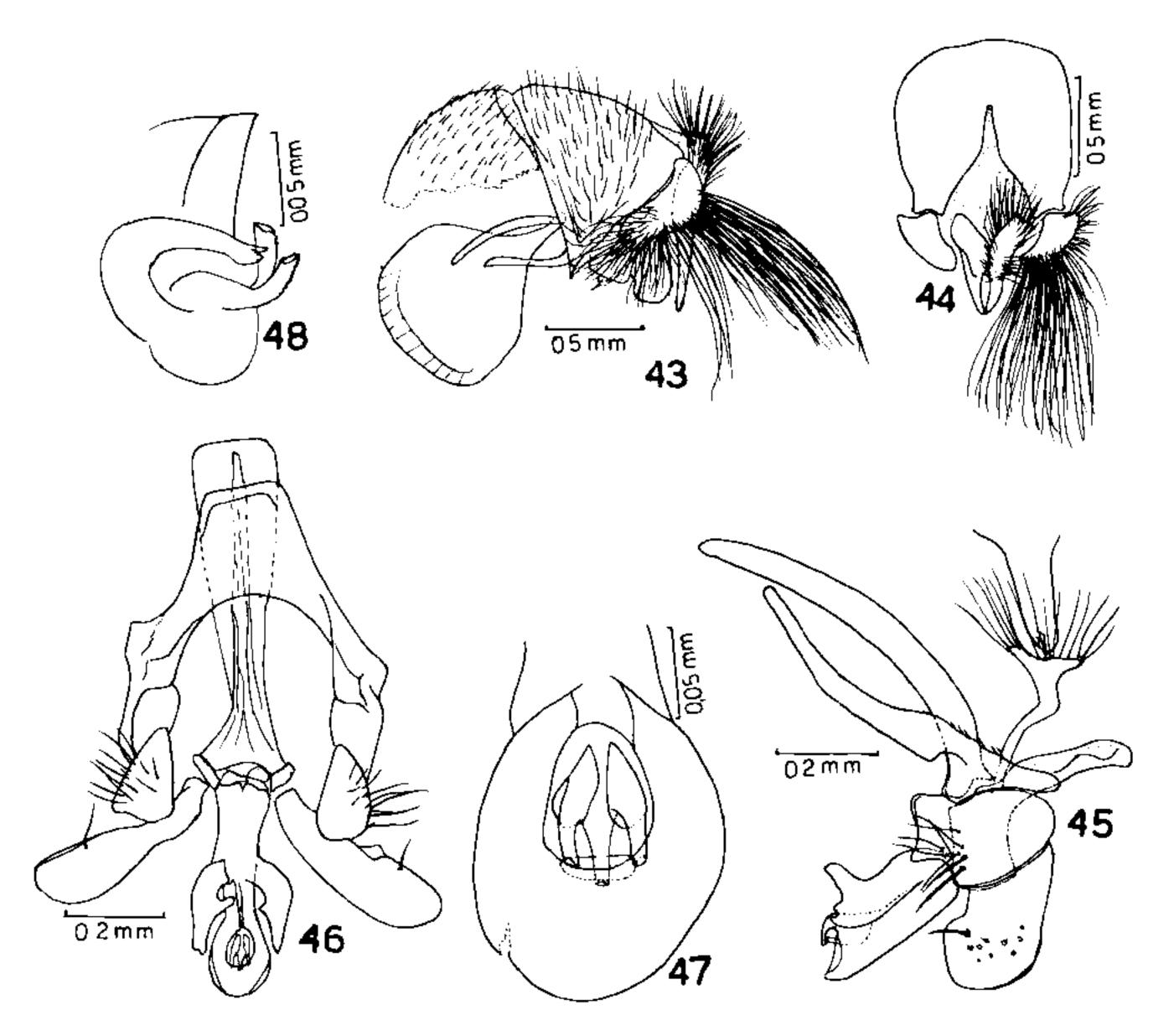
By the reduced penis, Sinopiella seems to be related to Peckiamyia Dodge but the exceeding development of the internal forcipes remember the species of Retrocitomyia Lopes. However, the fusion of apical and lateral plates with paraphallus and the structure of the glans are very peculiar.

## Sinopiella rufopilosa n. ap. (Figs. 43 to 48)

Male, length: 9 mm. Head pale yellowish back of head and gena gray, slightly yellowish, cheek grooves reddish, front about 0.19 of head width; 11-12 frontal bristles directed inwards, reaching basal third of second antennal segment, reclinate frontorbital bristle stronger than frontals; ocellar bristles with about the size of anterior frontals which are the strongest ones; outer vertical bristle not differentiated; paravertical bristle about twice the legenth of postvertical bristles; only one incomplete row of black hairs on occiput besides the post-ocular setae, the other hairs, including the hairs of gena are pale except a few anterior ones, posterior suture of gena indistinct; facialia with hairs on inferior half; no hairs on parafacialia which is as broad as 0.5 of the distance between vibrissae; antenna reddish gray, basal segments darker, reaching about 0.83 of the distance to vibrissa, second segment about 0.34 of third.

Thorax slightly yellowish pollinose; preacrostichal bristles not differentiated, prescutellar well developed; 3-4 small predorsocentrals; a very long post-dorsocentral just before scutellum, one well developed and two scarcely differentiated bristles; 1:2 intralars, 1:3 supralars; scutellum with 3 marginals, median one small and inserted near posterior one; preapical moderate, apical pair absent; katepisternum with 3 bristles, median one small, inserted a little below others; meron with 11 bristles. Wings with brown veins, R4-5 with hairs on basal 2/3 of the distance to transverse; legs black, tibiae reddish, middle femur with ctenideum, no long villosity.

Abdomen reddish brown, more intensely red on fifth segment, with pale yellow pollinosity, median marginal bristles on fourth tergite scarcely differentiated, all pile on ventral side of the tergites and on sternites pale; sternites I and II with long dense pile, III and IV with short pile, V sternite red, with very short hairs, with a pair of conspicuous apophysis very much characteristic, long with almost parallel sides and blackish quadrangular apices; genital segments red, first without marginal bristles, surstyli with a tuft of exceeding long rufous hairs, cerci convergent, pointed, sternite IX and apodema penis very long, apodema ductus very much enlarged, with vestigial umbrella (Figs. 43, 44); forcipes interiores very large, with a small bristle and minute hairs on outer face; palpi genitalium rounded, with some bristles and long hairs; penis very short, with distinct theca, strongly sclerotized; plates of paraphallus fused; ventralia conspicuos, weel



Sinopiella rufonilosa n. sp., male. — Fig. 43: genital segments; fig. 44: cerci, posterior view; fig. 45: phallic organs, lateral view; fig. 46: idem, ventral view; fig. 47: apex of penis, ventral view; fig. 48; glans, lateral view.

sclerotized, composed of two arms with internal apophysis; glands protected into a cavity, styli and median process tubular (Figs. 45 - 48).

### Holotype male, X.1974.

#### RESUMO

As espécies do gênero Euboettcheria são, pela primeira vez, observadas como dominantes (54.39%), com sete espécies, em Sinop, Estado de Mato Grosso, Brasil. Duas novas espécies (alvarengai e roppai) e têmeas de espécies conhecidas foram descritas e figuradas. Notochaeta sinopi n. sp. e Sinopiella rufopilosa n. gen., n. sp. são também descritos.

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