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## REVISION OF NEOTROPICAL *GENEA* RONDANI (DIPTERA, TACHINIDAE, TACHININAE, LESKIINI)

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### ABSTRACT

*The Neotropical species of Genea Rondani, 1850 (Diptera, Tachinidae, Tachininae, Leskiini) are revised by the examination of type-material of almost all species and a large material deposited in many scientific collections. G. australis (Townsend), G. brasiliensis (Townsend), G. gracilis James, G. jaynesi (Aldrich), G. major (Townsend), G. pellucens (Curran), G. tenuirostris (James), G. trifaria (Wiedemann) were keyed and redescribed with the first descriptions of male terminalia. G. longipalpis (Wulp) was not included in this study as no material was examined and the available data are restricted to the original description. G. glossata (Townsend) is proposed as a junior synonym of G. trifaria. G. paulistana sp. nov. from São Paulo is proposed as a new species.*

KEY-WORDS: Identification; Key; Morphology; Revision; Taxonomy.

### INTRODUCTION

*Genea* Rondani, 1850 (Diptera, Tachinidae) is a genus of Leskiini with ten Neotropical and seven Nearctic species (O'Hara & Wood, 2004; Wood & Zumbado, 2010).

This is one of the oldest genera of the tribe and some of its species are recorded as parasitoids of the sugarcane borer *Diatraea* spp. (Lepidoptera, Pyralidae).

James (1947) presented a study on *Genea* and suggested that *G. glossata* and *G. trifaria* were probably conspecific. Some years later, Guimarães (1971) listed five species in the genus. Guimarães (1977) published a catalogue of host parasites which

included few *Genea* species parasitising Pyralids (Lepidoptera).

The total number of neotropical species is due to the revision of the nomenclatural changes of the Nearctic tachinids made by O'Hara & Wood (1998), where they formalized the previous changes implicitly applied by Wood (1987). In this sense, the Neotropical genera *Dejeaniopalpus* Townsend, *Jaynesleskia* Townsend and *Leskiomima* Brauer & Bergenstamm are synonymous of *Genea* Rondani.

Concerning the 10 known Neotropical species of *Genea* we confirm the synonymy between *G. trifaria* (Wiedemann) and *G. glossata* (Townsend), previously suggested by James (1947) and one new species *G. paulistana* spec. nov. was also described.

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The opportunity to study a copious material of several scientific collections including the examination of type material, led to this revision where *G. australis* (Townsend), *G. brasiliensis* (Townsend), *G. gracilis* James, *G. jaynesi* (Aldrich), *G. major* (Townsend), *G. pellucens* (Curran), *G. tenuirostris* (James), *G. trifaria* (Wiedemann) are keyed and re-described with the first descriptions of male terminalia. *Genea longipalpis* (Wulp) was not included in this study as no material was examined and the available data are restricted to the original description. *Genea glossata* (Townsend) is proposed as a junior synonym of *G. trifaria*.

## MATERIAL AND METHODS

The material examined belongs to the collections of the Museu de Zoologia da Universidade de São Paulo (MZSP), Instituto Nacional de Pesquisa da Amazonia (INPA) and National Museum of Natural History (USNM), wherein most of the types of *Genea* are housed.

The male terminalia were treated with potassium hydroxide (KOH 10%), neutralized with acetic acid (50%), placed through an alcoholic series (70%, 90%) and glycerin. After this treatment they were dissected, drawn and posteriorly put into a microvial with glycerin pinned with their respective specimen. The drawings were made with a Wild M3C stereoscopic microscopic and a Leica DMLS microscopic, both with camera lucida. The types of *G. trifaria* and *G. longipalpis* were not examined because their loan were not made possible. The terminology adopted in the descriptions are the same proposed by O'Hara (2002).

## RESULTS

### *Genea Rondani, 1850*

*Genea Rondani, 1850: 172. Type species: Genea maculiventris Rondani, 1850 (= Stomoxys trifaria Wiedemann, 1824) (by monotypy).*

*Geneopsis Townsend, 1927: 212. Type-species, major Townsend original designation).*

*Geneoglossa Townsend, 1935: 225. Type-species, glossata Townsend original designation).*

*Leskiomima Brauer & Bergenstamm, 1891: 68, 102 (also 1892: 372, 406; subsequently spelled Leskiomera, error). Type species: Stomoxys tenera Wiedemann, 1830 (by monotypy).*

*Dejeaniopalpus Townsend, 1916d: 312. Type species: Dejeaniopalpus texensis Townsend, 1916 (original designation).*

*Jaynesleskia Townsend, 1934: 395. Type species: Leskiomima jaynesi Aldrich, 1932 (original designation).*

*Leskiella James, 1947: 96. Type species: Leskiella brevirostris James, 1947 (original designation). [Nearctic].*

## Recognition

Yellow and golden flies of variable length, ranging from 5.5 to 12 mm.

*Head:* white coloured with silver or golden pruinosity near vertex; dichoptics; eyes bare; antenna yellow; scape erect and very close to each other; arista slightly plumose; vitta yellow; frontal setae row ending a little below the level of the antennal insertion; face visible in profile; long proboscis, mentum always surpassing the head height; occiput with white pruinosity, the upper half of head dark in ground colour otherwise white; beard white.

*Thorax:* scutum with golden pruinosity; acrostichal setae 1+1 or 2+1; intra-alars 1+3; notopleurals 2; supra-alars 3, the second one the largest; postalars 2; prosternum bare; proepisternum with one seta, bare above; 1 proepimeral seta; katepisternals setae 2:1; anepisternals 5-7; merals 5-11; katepimeron bare or with a few setulae. Wing usually long and a little bit narrower in males; vein  $R_1$  entirely setulose on dorsal surface (except in *G. jaynesi*, setulose basally on dorsal surface), vein  $R_{4+5}$  setulose from base (sometimes with some ventral setulae) to crossvein r-m on dorsal surface and sometimes, surpassing it; wing cell  $r_{4+5}$  narrowly open near apex; vein  $M_1$  rarely with few sparse setulae. Legs with medial surface of coxa entirely bare; fore femur with a row of anterodorsal, posterodorsal and posteroventral setae each; fore tibia with one anterodorsal row of setae; claws and pulvilli well developed in males, (except in the species where the females and males are alike, both presenting proclinate and reclinate orbital setae); hind femur with one anterodorsal row of setae; hind tibia with one anterodorsal row of setae, the median one the largest.

*Abdomen:* yellow and/or gold, presenting median apical brownish spots dorsally or dorsal brown

stripes; small lateral brown spots on T<sub>3</sub> to T<sub>5</sub> sometimes fused with the median apical spots or with the dorsal brown stripes; median marginal setae, sometimes present on T<sub>1+2</sub> and always present on T<sub>3</sub> (except in *G. gracilis*); row of marginals on T<sub>4</sub> and T<sub>5</sub>.

*Male terminalia*: sternite 5 square shaped with “V” shaped median cleft covered with setulae and usually with a dark brown area around setae close to the hind margin; high arched epandrium; hipandrium not fused dorsally; distiphalus with lateral arms short; ejaculatory apodeme fan shaped.

**Key to the Neotropical species of *Genea* (*G. longipalpis* not included)**

1. Abdomen with median basal brownish spots like upside-down triangles [Venezuela, Colombia, Brazil, Argentina] ..... *G. jaynesi* (Aldrich)  
 Abdomen with a median dorsal brown stripe or at least median apical brown spots dorsally on T<sub>3</sub> and/or T<sub>4</sub> ..... 2
2. Palpus filiform or slightly clavate, with at most 1.2 times the length of the first flagellomere ..... 3  
 Palpus exceptionally long, extending forward far beyond the lower facial margin, at least 1.5-2.0 times longer than the first flagellomere ..... 5
3. Large and robust flies; mentum with almost the same length of the head height; wing vein R<sub>1</sub> dorsally setulose on the base; T<sub>5</sub> deep yellowish, distinct from the other tergites [Honduras, Guatemala, Mexico] ..... *G. pellucens* (Curran)  
 Small and delicate flies; mentum at least 1.3 times longer than head height; wing vein R<sub>1</sub> entirely setulose on dorsal surface; T<sub>5</sub> colour indistinct from the other tergites ..... 4
4. Fronto-orbital plate broad with almost the same width of the eye at the level of the antennal insertion; vein M<sub>1</sub> sometimes with few sparse setulae; T<sub>3</sub> with one pair of median marginals; T<sub>3</sub>-T<sub>5</sub> with a white pruinose band at the anterior margin [Brazil, Bolivia] ..... *G. australis* (Townsend)  
 Fronto-orbital plate narrow with half width of the eye at the level of the antennal insertion; vein M<sub>1</sub> always bare; T<sub>3</sub> without median marginals; T<sub>3</sub> and T<sub>4</sub> with transversal brown bands at the posterior margin fused to the median apical brown spots of these tergites [Brazil] ..... *G. gracilis* James
5. Abdominal dorsal brown stripe continuous from the T<sub>1+2</sub> excavation to the apical margin of T<sub>4</sub> ..... 6  
 Abdominal dorsal stripe absent, abdomen only with median apical brown spots dorsally on T<sub>3</sub> and T<sub>4</sub>, fused or not to the transversal brown bands at the posterior margin of these tergites ..... 7
6. Flies with over 8.0 mm of length; frons at least 0.40 of the head width at the level of the anterior ocellus; males and females with proclinate and reclinate orbital setae [Brazil] ..... *G. brasiliensis* (Townsend)  
 Flies with less than 8.0 mm of length; frons with less than 0.30 of the head width at the level of the anterior ocellus, males without proclinate and reclinate orbital setae [Brazil] ..... *G. paulistana* sp. nov.
7. Abdomen with median apical brown spots dorsally fused to a transversal brown band at the posterior margin of T<sub>4</sub> and rarely also on T<sub>3</sub> [Brazil, Paraguai] ..... *G. major* (Townsend)  
 Abdomen with median apical brown spots dorsally on T<sub>3</sub> and T<sub>4</sub> and sometimes also present on T<sub>1+2</sub> ..... 8
8. Rounded median apical brown spot dorsally on T<sub>3</sub> never surpassing the median line of this tergite [Mexico, Brazil] ..... *G. tenuirostris* (James)  
 Triangular median apical brown spot dorsally on T<sub>3</sub> surpassing the median line of this tergite [Brazil, Honduras, panama, Venezuela] ..... *G. trifaria* (Wiedemann)

***Genea australis* (Townsend, 1929)  
 (Figures 1-5)**

*Genea australis*; Wood, 1987: 1264 (combination to *Genea*); O'Hara & Wood, 1998: 761 (combination to *Genea* formalized).

*Leskiomima australis* Townsend, 1929: 368 (original description based on a male, wrongly identified as female by the author); Townsend, 1939: 224-225 (genus redescription and a remark over *L. australis*); James, 1947: 100-101 (key and redescription of male); Guimarães, 1971: 117 (catalogue).

*Diagnosis*: Males and females alike with 2 pairs of proclinate orbital setae and 2 pairs of reclinate orbital setae; frontal setae sparse and crossed; antennal insertion little above eye middle; gena with 1/4 of eye length; palpus slightly clavate with not more than 1.2

times the length of the flagellomere; proboscis long, mentum length 1.5 times the head height; vein  $R_1$  entirely setulose on dorsal surface and vein  $R_{4+5}$  setulose from the base almost to crossvein r-m on dorsal surface; vein  $M_1$  usually with sparse few setulae; claws and pulvilli short; yellow abdomen with median apical brown spots dorsally;  $T_{1+2}$  not excavate to its hind margin; small median apical brown spots dorsally on  $T_{1+2}$ ,  $T_3$  and  $T_4$ ; usually with 1 pair of median marginal setae on  $T_3$ ; anterior margin of  $T_3$ ,  $T_4$  and  $T_5$  with a narrow white pruinose band.

*Male*: Body length, 5.5-6.5 mm; wing, 4.5-5.5 mm.

*Head*: White colour and gold near vertex; ocellars setae divaricate; inner vertical setae long; 5-6 pairs of sparse frontal setae crossed, one pair below the level of the antennal insertion (Fig. 1); frons with 0.5 of the head width at the level of the anterior ocellus; flagellomere slightly brown, yellow on the base; arista slightly plumose; proboscis long, mentum 1.5 times the head height; 6-8 pairs of subvibrissal setulae, shorter near vibrissa; 1-2 setulae above the vibrissa; palpus yellow, slightly clavate with not more than 1.2 times the length of the flagellomere; occiput slightly convex.

*Thorax*: Brown in ground colour with golden pruinosity; dorsocentrals 2+3; post-pronotals 1+2 or 2+2; scutellum with one pair of basal setae, one pair of subapical setae and one pair of discal setae near apex; pleura with a dense golden pruinosity. Wing and calypter slightly infuscate; vein  $R_1$  entirely setulose on dorsal surface (Fig. 2) and vein  $R_{4+5}$  setulose from base almost until crossvein r-m on dorsal surface; vein  $M_1$  usually with few sparse setulae. Legs yellow and tarsi dark brown; fore tibia with 2-3 long posterodorsal setae on middle third; 1 dorsal subapical seta; 1 anteroventral and 1 posteroventral apical seta each, claws and pulvilli short; mid femur with 1 anterior seta on middle third; 1-2 posterodorsal setae on apical third; mid tibia with 1 long anterodorsal seta on middle third; 2 sparse posterodorsal setae on middle third; 1 ventral seta on middle third; 1 anteroventral, 1 ventral, 1 posteroventral and 1 posterodorsal apical seta each; hind femur with one posteroventral and one row of anteroventral setae on basal half and 1 anteroventral apical seta; 1-2 posterodorsal apical setae; hind tibia with one posterodorsal row of setae; 2-3 ventral setae, the apical one the largest; 1 anterodorsal and 1 posterodorsal subapical seta each; 1 anteroventral and 1 posteroventral apical seta each.

*Abdomen*: Yellow with small median apical brown spots dorsally;  $T_{1+2}$  not excavate to its hind margin; small median apical brown spots dorsally usually on  $T_{1+2}$ ,  $T_3$  and  $T_4$ ; usually with one pair of short median marginals on  $T_3$ ; anterior margin of  $T_3$ ,  $T_4$  and  $T_5$  with a narrow white pruinose band.

*Male terminalia* (Figs. 3-5): Sternite 5 as described for genus; cerci not fused and large; surstyli slightly shorter than cerci; cerci with very short setulae turned upwards on its apical half; postgonite narrow and pregonite triangular in lateral view.

*Female*: Similar to male.

*Type material*: Holotype male (n57289). BRAZIL. São Paulo: Itaquaquecetuba, 13.iii.1929, *Leskiomima australis*, (Townsend) (USNM).

*Other material examined*: BRAZIL. Paraíba: João Pessoa, 1 female, 20.x.1954, Silva, A.G.A. col. (MZSP); Goiás: Jataí, 1 male, i.1955, Carrera col. (MZSP); Mato Grosso do Sul: Três Lagoas, Faz. Floresta, Exp. Dept. Zoologia, 1 male, 13-20.x.1964 (MZSP); Minas Gerais: Arceburgo, 1 male, iii.1945, Barreto col. (MZSP); São Paulo: Lençóis Paulistas, Barra Grande, Faz. Debroado, 1 male, ii.1975, (in *Diatraea*), Terán col. (MZSP); 1 female, same label as previous (MZSP); 1 female, 19.iv.1955, Lenko col. (MZSP); 1 male, 03.ii.1962, Lenko col. (MZSP); BOLIVIA. Santa Cruz: Saavedra, Exp. Sta., 5 males and 2 females, vi.1976, [Ex. *Elasmopalpus lignosellus*] Colque, E. Col. (USNM); Santa Cruz, 1 female, 1.iii.1988, [Ex. *Elasmopalpus lignosellus*] Pruett, C. col. (USNM).

*Geographic distribution*: Brazil and Bolivia (new record).

*Comments*: There are records of parasitism on the pyralid *Elasmopalpus lignosellus* Zeller, 1848.

### ***Genea brasiliensis* (Townsend, 1929) (Figures 6-7)**

*Dejeaniopalpus brasiliensis* Townsend, 1929: 368 (original description of male and female); James, 1947: 104-106 (key and redescription of male and female); Guimarães, 1971: 116 (catalogue). *Genea brasiliensis*; Wood, 1987: 1264 (combination to *Genea*); O'Hara & Wood, 1998: 761 (combination to *Genea* formalized).

*Diagnosis:* Males and females alike with proclinate and reclinate orbital setae; vitta yellow; parafacial white with the same width of the flagellomere; 5-8 pairs of frontal setae, 2-3 pairs below the level of the antenna insertion; inner and outer verticals present; palpus clavate and exceptionally long with almost twice the length of the flagellomere; proboscis long, with 1.5 times the head height. Wing vein  $R_1$  entirely setulose and vein  $R_{4+5}$  setulose from base to crossvein r-m; scutellum yellowish, with 1 pair of weak discal setae; abdomen yellow, somewhat darker on  $T_4$  and  $T_5$ , with a brown stripe dorsally and with a golden pruinosity on  $T_3$  to  $T_5$  on females; 1 pair of median marginal setae on  $T_3$ .

*Male:* Body length, 8.0-10.0 mm; wing, 7.0-9.0 mm.

*Head:* Fronto-orbital and vertex slightly gold; parafacial white with the same width of the flagellomere; vitta yellow; 5-8 pairs of frontal setae, 2-3 pairs below the level of the antennal insertion; frons with 0.45 of head width at the level of anterior ocellus; inner and outer vertical setae present; antenna yellow, flagellomere brown, yellow on base; arista slightly plumose; proboscis long, with 1.5 times the head height (Fig. 6); long vibrissa; 4-7 pairs of subvibrissal setulae, shorter near vibrissa; 1-3 pairs of setulae above the vibrissa; palpus clavate and exceptionally long with almost twice the length of the flagellomere.

*Thorax:* Brown in ground colour and with white and gold pruinosity; dorsocentrals 3+3; post-pronotals 3; scutellum yellowish with one pair of basal setae; one pair of subapical setae and one pair of weak discal setae; pleura yellowish on anterior half otherwise brown, covered with white pruinosity and with long yellow setulae. Wing and calypter hyaline; vein  $R_1$  entirely setulose and vein  $R_{4+5}$  setulose from base to crossvein r-m. Legs with coxa, trochanter and femur yellow; fore tibia yellow, mid and hind tibia slightly brown and tarsus brown; fore tibia with 2 long posterior setae on middle third; 1 anterodorsal and 1 dorsal subapical seta; 1 posteroventral apical seta; claw and pulvilli short; mid femur with 2 anterior setae on middle third; 2-3 long and sparse posteroventral setae on basal half; 2 posterodorsal subapical setae; mid tibia with 1 long anterodorsal seta on middle third and 1 short seta on apical third; 1 strong ventral seta on middle third; 2 posterior setae on middle third; 1 anterodorsal and 1 posterodorsal subapical seta; 1 anteroventral, 1 ventral and 1 posteroventral apical seta; hind femur with 2 posterodorsal setae on apical third; 2-3 posteroventral sparse setae on basal half and

1 anteroventral on basal, mid and apical third each; hind tibia with one posterodorsal row of setae; 2 ventral setae on middle third; 1 anterodorsal subapical and 1 posterodorsal subapical seta; 1 anteroventral apical seta.

*Abdomen* (Fig. 7): Yellow and somewhat darker on  $T_4$  and  $T_5$ ;  $T_{1+2}$  not excavate to its hind margin; with a brown stripe dorsally and with a white pruinose band on  $T_3$  to  $T_5$  basal margins and lateral brown spots on  $T_3$ ,  $T_4$  and  $T_5$ ; 1 pair of median marginal setae on  $T_3$ .

*Male terminalia:* Not dissected.

*Female:* Differs from male as follows: palpus slightly clavate; abdomen with a large median shiny brown spot dorsally more large and more conspicuous white pruinose band on  $T_3$  to  $T_5$  basal margins.

*Type material:* Lectotype male (n57291). BRAZIL. São Paulo: Itaquaquecetuba, xi.1920, Townsend (USNM); paralectotype, 1 female, ix.1915, same label as male (USNM).

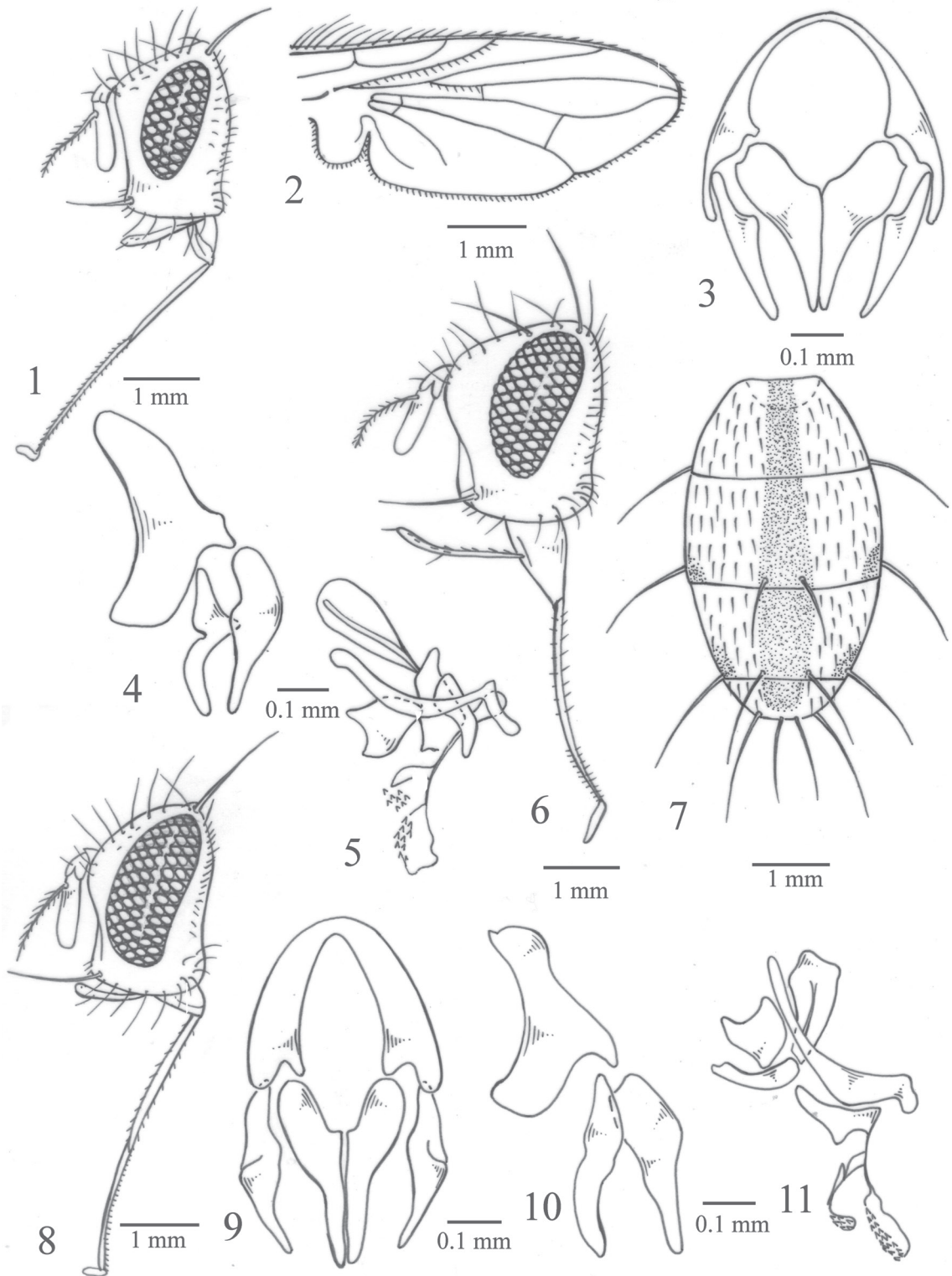
*Geographic distribution:* Brazil (São Paulo).

*Comments:* Easily recognised by the median dorsal brown stripe on the abdomen from  $T_{1+2}$  to  $T_5$ ; males and females alike with reclinate and proclinate orbital setae and claw and pullvillus short.

### ***Genea gracilis* James, 1947 (Figures 8-11)**

*Genea gracilis* James, 1947: 111-112 (original description of male and female); Guimarães, 1971: 116 (catalogue).

*Diagnosis:* Males with 9-12 pairs of frontals, females with 7-10 pairs, 1-2 pairs below the level of the antennal insertion; weak ocellars; outer verticals not differentiated in both sexes; palpus long with 1.5 times the length of the flagellomere; proboscis long, with 1.5 times the head height, tapering to tip and dark on the apical half; wing vein  $R_1$  entirely setulose and vein  $R_{4+5}$  setulose from base to crossvein r-m; scutellum yellowish; pair of discal setae absent or weak; yellow abdomen with median apical brown spots dorsally, almost like a dorsal stripe, fused with lateral brown spots on  $T_3$  and  $T_4$ ; median marginal setae absent on  $T_{1+2}$  and  $T_3$ ; marginal rows on  $T_4$  and  $T_5$ .



**FIGURES 1-5:** *Genea australis* (Townsend) 1. Head, lateral view; 2. Wing, dorsal view; 3. Epandrium, cerci and surstylus, posterior view; 4. Epandrium, cerci and surstyli, lateral view 5. Aedeagal complex, lateral view. **Figures 6-7:** *Genea brasiliensis* (Townsend) 6. Head, lateral view; 7. Abdomen, dorsal view. **Figures 8-11:** *Genea gracilis* James 8. Head, lateral view; 9. Epandrium, cerci and surstyli, posterior view; 10. Epandrium, cerci and surstyli, lateral view; 11. Aedeagal complex, lateral view.

*Male:* Body length, 5.0-8.0 mm; wing, 4.0-7.0 mm.

*Head:* White; parafrenal with golden pruinosity; eyes almost bare; 9-12 pairs of frontal setae, 1-2 pairs below the level of antennal insertion; weak ocellars; frons with 0.20 of head width at the level of the anterior ocellus; inner verticals present, outer verticals not differentiate from postoculars in either sex; antenna yellow, flagellomere brown, yellow on base; arista slightly plumose; proboscis long with 1.5 times the head height (Fig. 8), tapering to tip and dark on apical half; long vibrissa; 3-5 pairs of subvibrissals, shorter near vibrissa; 1-2 pairs of setulae above vibrissa; palpus long with 1.5 times the length of the flagellomere.

*Thorax:* Brown in ground colour with white and golden pruinosity; dorsocentrals 2+3; post-pronotals 1+2; scutellum with one pair of basal setae; one pair of subapical setae and one pair of weak discal setae or discals absent; pleura brown (except for yellow post-pronotal lobe) with a dense white pruinosity and long yellow setulae. Wing and calypter slightly infuscated, vein  $R_1$  entirely setulose and vein  $R_{4+5}$  setulose from base to crossvein r-m. Legs with coxa, trochanter and femur yellow except for the hind femur slightly brown on apical third; tarsus brown; fore tibia with 1 long posterior seta on middle third; 1 dorsal subapical seta; 1 posteroventral apical seta; claws and pulvilli well developed; mid femur 2-6 sparse and long posteroventral setae on basal half; 2 posterodorsal setae on apical third; mid tibia with 1 strong anterodorsal seta and 1 strong ventral seta on middle third; 2 posterior setae on middle third; 1 anterodorsal and 1 posterodorsal subapical seta each; 1 anteroventral, 1 ventral and 1 posteroventral apical seta each; hind femur with 2 posterodorsal setae on apical third; 4-6 anteroventral setae on basal half and 1 anteroventral seta on apical third; 6-8 sparse posteroventral setae on basal half; hind tibia one posterodorsal row of setae on middle third; 3-4 ventral setae on middle third, the apical the largest; 1 anterodorsal and 1 posterodorsal subapical seta each; 1 ventral apical seta.

*Abdomen:* Yellow;  $T_{1+2}$  not excavate to its hind margin and with a brown spot dorsally;  $T_3$  and  $T_4$  with median apical brown spots dorsally, almost like a dorsal stripe, fused with the lateral brown spots;  $T_5$  with lateral brown spots; median marginals absent.

*Male terminalia* (Figs. 9-11): Sternite 5 as described for genus; cerci not fused; surstylus similar in length with cerci and slightly curved towards the cerci tip; distiphallus with lateral arms short; pregonite triangular

in lateral view with a few setulae at tip and postgonite narrow, apically curved downward and pointed.

*Female:* Differs from male as follows: 1 pair of proclinate and 1 pair of reclinate orbital setae; frons with 0.35 the head width at the level of the anterior ocellus; palpus slightly clavate; claws and pulvilli short.

*Type material:* Paratypes. BRAZIL. Santa Catarina: Nova Teutônia, 1 male, 11.v.1939, Fritz Plaumann, col. (USNM); 1 female, 31.v.1939, Fritz Plaumann, col. (USNM).

*Other material examined:* BRAZIL. Santa Catarina: Nova Teutônia, 1 male, vii.1967, Fritz Plaumann, col. (MZSP).

*Geographic distribution:* Brazil.

*Comments:* It is a delicate fly with long proboscis, tapering to tip; wing vein  $R_1$  setulose on dorsal surface and vein  $R_{4+5}$  setulose on dorsal surface from base to crossvein; it is the only species of *Genea* without median marginals on  $T_3$ .

### ***Genea jaynesi* (Aldrich, 1932) (Figures 12-16)**

*Leskiomima jaynesi* Aldrich, 1932: 17 (original description of male and female, 12 reared from *Diatraea saccharalis* – Lepidoptera – Pyralidae; Townsend, 1939: 224-225 (genus description).

*Jaynesleskia jaynesi*; Townsend, 1934: 395 (comb. nov.); Guimaraes, 1971: 117 (catalogue).

*Genea jaynesi*; Wood, 1987: 1264 (comb. nov.); O'Hara & Wood, 1998: 761 (comb. nov. formalized).

Males and females alike with 2 pairs of reclinate orbital setae and 2 pairs of proclinate orbital setae; claws and pulvilli short in either sex; abdomen yellow with medial basal upside-down triangular brown spots on  $T_{1+2}$  to  $T_5$ ;  $T_{1+2}$  not excavate to its hind margin; 1 pair of median marginal setae on  $T_3$  and narrow white pruinose band on the basal margin of  $T_3$  to  $T_5$ .

*Male:* Body length, 7.5-8.5 mm; wing, 6.0-7.0 mm.

*Head:* White, golden near vertex; ocellar setae divaricate; eyes bare; 5-6 pairs of sparse and crossed setae, 1-2 pairs below the level of the antennal insertion; eyes bare; antennal insertion slightly above

eye middle; gena with 1/4 of the eye length; palpus slightly clavate and similar in length with antenna; proboscis long, mentum 1.5 times the head height (Fig. 12); frons with 0.5 of the head width at the level of the anterior ocellus; antenna yellow; flagellomere brown, yellow on base; arista short plumose; 6-8 pairs of subvibrissal setulae, shorter near vibrissa; 1-2 pairs of setulae above the vibrissa; palpus yellow, clavate, similar in length with antenna; occiput slightly convex.

*Thorax:* Brown in ground colour with golden pruinosity; dorsocentrals 3+3; post-umerals 1+2; scutellum with 1 pair of basal setae, 1 pair of subapical setae and 1 pair of discal setae near the apex; pleura with dense golden pruinosity. Wing slightly infuscated, calypter hyaline; vein  $R_1$  setulose basally (1-3 hairs) and vein  $R_{4+5}$  setulose from base almost to crossvein r-m (Fig. 13). Legs yellow and tarsus brown; fore tibia with 2-3 long posterodorsal setae on middle third; 1 anterodorsal and 1 dorsal subapical seta; 1 anteroventral, 1 ventral and 1 posteroventral apical seta each; claws and pulvilli short; mid femur 1-2 anterior setae on middle third; 1-2 posterodorsal setae on apical third; mid tibia with 1 strong anterodorsal seta on middle third; 2-3 sparse posterodorsal on middle third; 1 ventral seta on middle third; 1 anterodorsal and 1 anteroventral subapical seta each; 1 ventral, 1 posteroventral and 1 posterodorsal apical seta each; hind femur with one anteroventral row of setae on basal half and 1 seta on apical third; one posteroventral row of setae on basal half; 1-2 posterodorsal setae on apical third; hind tibia with 2-3 posterodorsal setae on middle third; 2-3 ventral setae, the apical the largest; 1 anterodorsal and 1 posterodorsal subapical seta each; 1 anteroventral and 1 posteroventral apical seta each.

*Abdomen:* Yellow with medial basal upside-down triangular brown spots on  $T_{1+2}$  to  $T_5$ ;  $T_{1+2}$  not excavate to its hind margin; 1 pair of median marginal setae on  $T_3$  and a narrow white pruinose band on the basal margin of  $T_3$  to  $T_5$ .

*Male terminalia* (Figs. 14-16): Sternite 5 as described for genus; cerci tip slightly curved inward; surstylus similar in length with cerci with short setulae turned upwards on its apical half; distiphallus with lateral arms short; pregonite triangular in lateral view; postgonite narrow in lateral view with few setulae on it.

*Female:* Similar to male.

*Type material:* Holotype male (n43062). ARGENTINA. Tucuman, 14.iii.1930, Jaynes, H.A. col., (USNM); Paratypes: n43062, 1 female, 11.ii.1930, [borer in dead heart – jan 1930] (USNM); 1 male, 21.ii.1930 (USNM); 1 male, 08.ii.1930 (USNM); 1 female, 21.ii.1930 (USNM); 1 female, 16.ii.1928 [reared by Box, H.E.] (USNM); 1 female, 15.xii.1928 [*Diatraea saccharalis* field cage], Jaynes, H.A. col. (USNM); 1 female, 28.xi.1928 [*Diatraea saccharalis* field cage], Jaynes, H.A. col. (USNM); 2 females, 29.i.1930 [borer in dead heart – jan 1930] (USNM); 1 female, 01.ii.1930 [borer in dead heart – jan 1930] (USNM).

*Other material examined:* VENEZUELA. Guarico: El sombrero, 175 m, 1 male, 24.vii.1951, Guagliumi, P. & Flores, S. col. [parasite of *Diatraea impersonatella* on *Paspalum paniculatum* (USNM); Apure Bruzuaz, 100 m, 1 female, 31.i.1950, Box, H.E. col. Van Emden det. [parasite of *Diatraea* on *Andropogon bicornis*] (USNM); COLOMBIA. Rio Paila, 1 male, 20.i.1965, Jaramillo, T. col. (USNM); 1 female, 17.ii.1965, Jaramillo, T. col. (USNM); 1 female, 06.ii.1965, Jaramillo, T. col. (USNM); 5 males and 8 females, with the same following data, Ingenio Rio Paila, 07.vii.1975, Gaviria col. (MZSP); BRAZIL. Mato Grosso do Sul: Maracaju, 1 male, ii.1937 [near Jaynesleikia Townsend, C.H.H.] (USNM); 1 male, ii.1937 (USNM); 1 male, iii.1937, Serviço Febre Amarela M.E.S. (USNM), Bras.; URUGUAI. Artigas: Bella Union, 1 male and 1 female, i.1988, [in Lab. de *Diatraea saccharalis*], Morey, C.S. (USNM).

*Geographic distribution:* Brazil, Argentina, Venezuela, Colombia (last two, new records).

*Comments:* There are records of parasitism on 2 pyralids: *Diatraea impersonatella* Walker, 1863 and *Diatraea saccharalis* Fabricius, 1794.

### *Genea longipalpis* (Wulp, 1890)

*Myobia longipalpis* Wulp, 1890: 138 (description).

*Genea longipalpis*; Aldrich, 1924: 214 (comb. nov.).

*Dejeanioalpus longipalpis*; James, 1947: 108-109 (comb. nov.); Guimarães, 1971: 116 (catalogue).

*Genea longipalpis*; Wood, 1987: 1264 (comb. nov.); O'Hara & Wood, 1998: 761 (comb. nov. formalized).

*Comments:* Not examined.



***Genea major* (Townsend, 1927)**  
(Figures 17-21)

*Geneopsis major* Townsend, 1927: 212 (original designation); Townsend, 1939: 221 (redescription).

*Genea major*; James, 1947: 110-111 (comb. nov.; redescription of male and female); Guimarães, 1971: 116 (catalogue).

**Diagnosis:** 10-13 pairs of frontal setae on males and 7-9 pairs of frontals on females, 1-2 pairs below the level of the antennal insertion; inner and outer verticals present; palpus clavate exceptionally long with almost twice the length of the flagellomere.

**Male:** Body length, 8.0-10.0 mm; wing, 6.5-8.5 mm.

**Head:** White; parafacial with golden pruinosity; 10-13 pairs of frontal setae, 1-2 pairs below the level of the antennal insertion; frons with 0.15 of head width at the level of the anterior ocellus; inner verticals crossed, outer verticals present; antenna yellow, flagellomere brown, yellow on base; arista slightly plumose; proboscis long, mentum 1.3 times the head height (Fig. 17); long vibrissa; 3-5 pairs of subvibrissal setulae; 1-2 pairs of setulae above the vibrissa; palpus clavate exceptionally long with almost twice the length of the flagellomere.

**Thorax:** Brown in ground colour with dense golden pruinosity; dorsocentrals 2+3 or 3+3; post-pronotals 1+2 or 1+3; scutellum yellow with one pair of discal setae near the apex and with 1 pair of basal setae; 1 pair of subapical setae and 1 pair of discal setae near the apex; pleura yellowish on anterior half otherwise brown with dense white pruinosity and long yellow setulae. Wing and calypter slightly infuscated; vein  $R_1$  entirely setulose and vein  $R_{4+5}$  setulose from base to crossvein r-m. Legs with coxa, trochanter and femur yellow, tarsus brown; fore tibia with 1-2 long posterior setae on middle third; 1 dorsal subapical seta; 1 ventral and 1 posteroventral apical seta each; claws and pulvilli well developed; mid femur with 1 anterior seta on middle third; 3-6 sparse posteroventral setae on basal half; 2-3 posterodorsal setae on apical third; mid tibia with 1 strong anterodorsal and 1 strong ventral seta on the middle third; 2-3 posterior setae on middle third; 1 anterodorsal subapical seta; 1 anteroventral, 1 ventral and 1 posteroventral apical seta each; hind femur with 2 posterodorsal setae on apical third; 4-6 anteroventral setae on basal third and 1 seta on apical third; 4-8 sparse posteroventral setae on basal half; hind tibia with 3-4 ventral setae on

middle third, the apical one the largest; 1 anterodorsal and 1 posteroventral subapical seta each; 1 ventral apical seta.

**Abdomen:** Yellow;  $T_{1+2}$  not excavate to its margin; median apical brown spots dorsally on  $T_{1+2}$ ,  $T_3$  and  $T_4$ , almost always fused with lateral brown spots on  $T_3$  and always fused with them on  $T_4$ ; usually with 1 pair of median marginal setae on  $T_{1+2}$  and always with 1 pair of median marginal setae on  $T_3$ .

**Male terminalia** (Figs. 18-21): Sternite 5 as in Fig. 18; cerci large and not fused; surstylus shorter than cercus with setulae turned upwards on the apical half; distiphallus with lateral arms short; postgonite narrow in lateral view and pregonite triangular in lateral view.

**Female:** Differs from male as follows: 2 pairs of proclinate orbital setae and 1 pair of reclinate orbital setae; frons with 0.40 of the head width at the level of the anterior ocellus; claws and pulvilli short.

**Type material:** Lectotype female (n57294). BRAZIL. São Paulo: Itaquaquecetuba, xi.1920 (USNM).

**Other material examined:** BRAZIL. São Paulo: Itaquaquecetuba, 1 female, v.1925, (*Geneopsis major*) (USNM); Salesópolis, Est. Biol. Boracéia, 1 female, iii.1969, Papavero, N. col. (MZSP); Barueri, 1 male, 26.vi.1966, Lenko, K. col. (MZSP); Peruíbe, 1 male, xii.1946, Carrera, M. col. (MZSP).

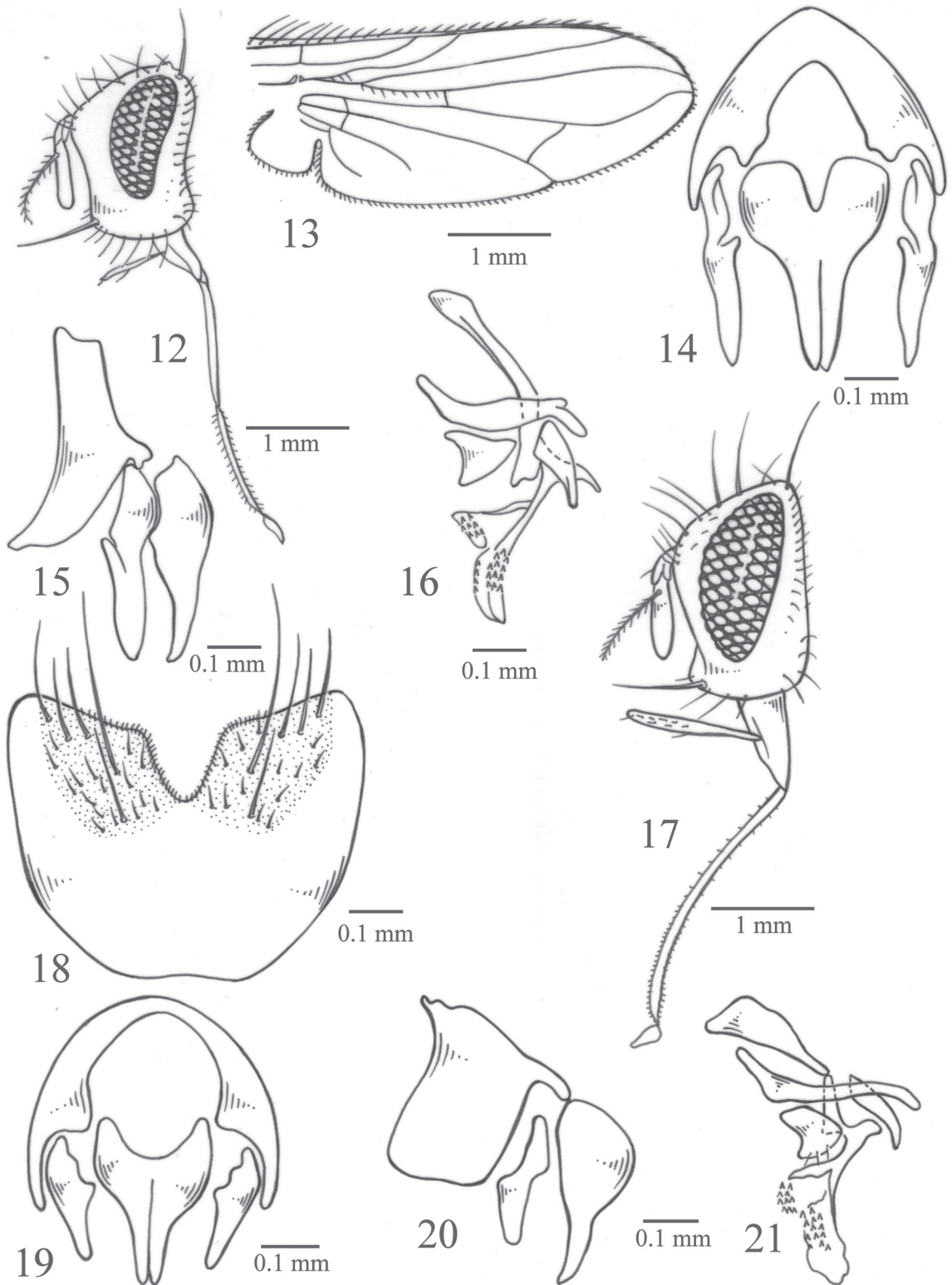
**Geographic distribution:** Brazil and Paraguay.

**Comments:** It is easily recognized by the large brown transverse band on  $T_4$  (sometimes also on  $T_3$ ) formed by the fusion of the median apical brown spot dorsally with the lateral brown spots. It may or may not present median marginals on  $T_{1+2}$ .

***Genea paulistana* sp. nov.**  
(Figures 22-26)

**Male:** Body length, 6.0-7.0 mm; wing, 5.0-6.0 mm.

**Head:** Parafacial and fronto-orbital plate white with slight golden pruinosity; vitta yellow; 8-10 pairs of frontal setae, 2-3 pairs below the level of the antennal insertion; tiny ocellar setae; frons with 0.10 of the head width at the level of the anterior ocellus; inner verticals crossed outer verticals distinct; antenna yellow; flagellomere brown, yellow on base; arista



**FIGURES 12-16:** *Genea jaynesi* (Townsend), 12. Head, lateral view; 13. Wing, dorsal view; 14. Epandrium, cerci and surstyli, posterior view; 15. Epandrium, cerci and surstyli, lateral view; 16. Aedegal complex, lateral view. **Figures 17-21:** *Genea major* (Townsend), 17. Head, lateral view; 18. Sternite 5; 19. Epandrium, cerci and surstyli, posterior view; 20. Epandrium, cerci and surstyli, lateral view; 21. Aedegal complex, lateral view.

slightly plumose; proboscis long with 1.3 times the head height (Fig. 22); long vibrissa; 3-5 pairs of subvibrissal setulae, shorter near vibrissa; 1-2 pairs of setulae above vibrissa; palpus long, yellow and filiform with almost twice the length of the flagellomere.

*Thorax:* Brown in ground colour with white pruinosity; dorsocentrals 3+3; post-pronotals 1+2; scutellum yellow with one pair of basal setae; one pair of subapical setae and one pair of discal setae; pleura brown (except for yellow postpronotal lobe) with white pruinosity and long yellow setulae. Wing and calypter slightly infuscated, vein  $R_1$  entirely setulose on dorsal surface and vein  $R_{4+5}$  setulose from base to almost crossvein r-m on dorsal surface. Legs with coxa, trochanter, femur and tibia yellow; fore tarsus slightly brown and mid and hind tarsi brown; fore tibia with 1 strong posterior seta on middle third; 1 dorsal subapical seta; claws and pulvilli well developed; mid femur with 1 anterior seta on middle third; 3-5 long and sparse posteroventral setae on basal half; 1 posterodorsal subapical seta; mid tibia with 1 strong anterodorsal and 1 strong ventral seta on middle third each; 2 posterior setae on middle third; one posterodorsal row of short setae; 1 anterodorsal, 1 dorsal and 1 posterodorsal subapical seta each; 1 anteroventral, 1 ventral and 1 posteroventral apical seta each; hind femur with 2 anterodorsal setae on apical third; 5-7 sparse anteroventral setae on basal half; 1 anteroventral apical seta; hind tibia with 3-4 ventral setae on middle third; 1 posterodorsal and 1 anterodorsal subapical seta each; 1 posteroventral apical seta.

*Abdomen:* Yellow;  $T_{1+2}$  not excavate to its hind margin; with a brown stripe not straight from  $T_{1+2}$  to  $T_4$ ,  $T_4$  with a large transversal brown band on the posterior margin; one pair of median marginal setae on  $T_3$ .

*Male terminalia:* Sternite 5 square with a "V" shaped median cleft and with brown areas around setae and setulae insertions (Fig. 23). Cerci not fused at the apical half (Fig. 24) and slightly curved inward at tip (Fig. 25); surstylus shorter than cercus with short setulae on the apical half; distiphallus with lateral arms short; postgonite narrow in lateral view and pregonite triangular in lateral view (Fig. 26).

*Female:* Differs from male as follows: frons with 0.25 of head width at the level of the anterior ocellus; 2 pairs of reclinate orbital setae and 2 pairs of proclinate orbital setae; palpus slightly clavate; claws and pulvilli short.

*Type material:* Holotype male. BRAZIL. SP, São Paulo, Vila Ema (MZSP). Paratypes, 1 male and 2 females, same data as holotype (MZSP).

*Geographic distribution:* Brazil.

*Comments:* Easily recognized by its short length (6.0-7.0 mm), palpus exceptionally long and filiform, a straight brown dorsal stripe which enlarges at the apical margin of each tergite from  $T_{1+2}$  to  $T_4$  and  $T_4$  with a large transversal brown band on the posterior margin.

***Genea pellucens* (Curran, 1925)  
(Figures 27-28)**

*Leskia pellucens* Curran, 1925: 261 (description of male).

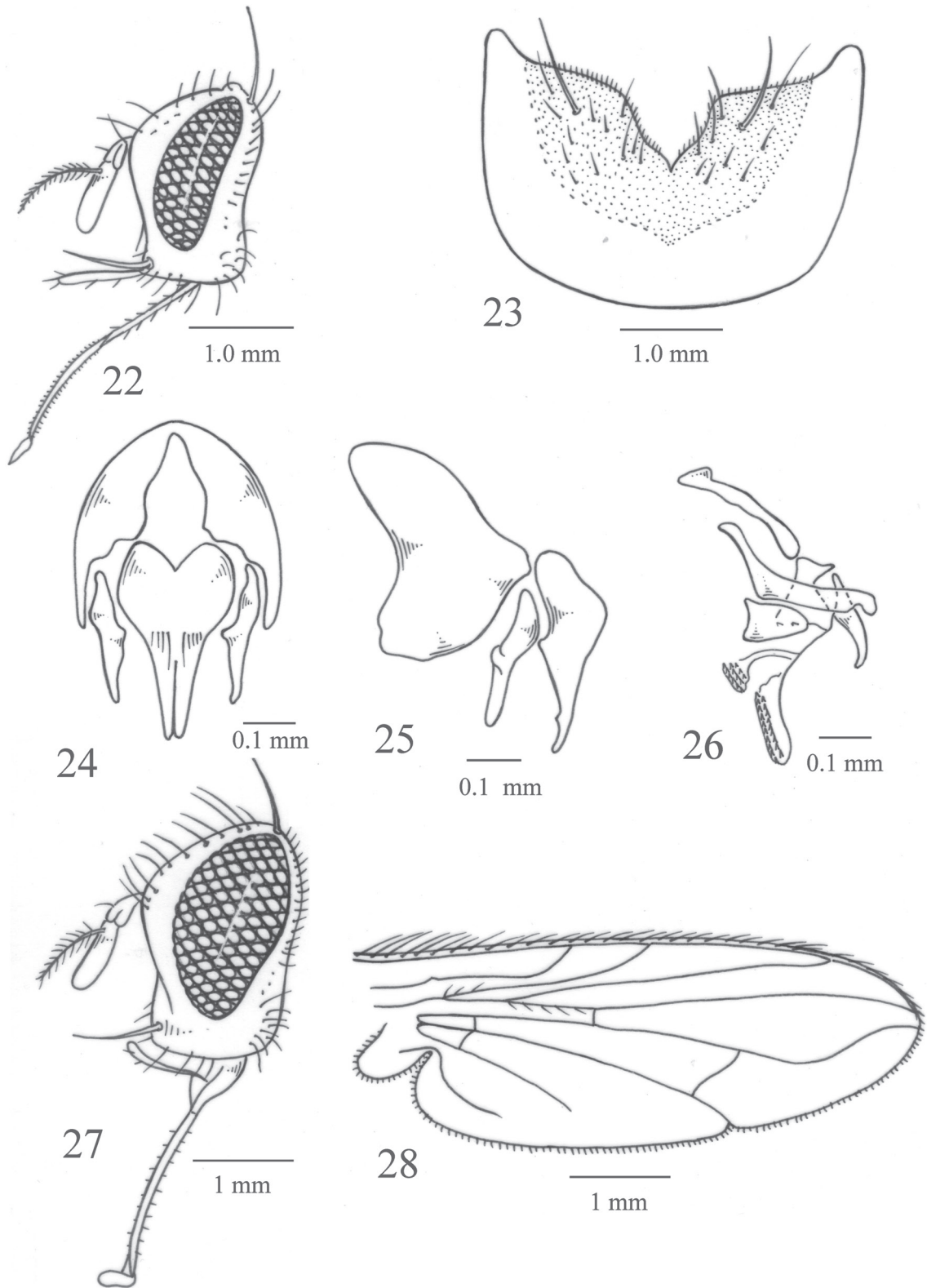
*Myobia pellucens*; Curran, 1934: 507 (comb. nov.?  
key).

*Genea pellucens*; Guimarães, 1971: 116 (comb. nov.; catalogue).

*Male:* Body length: 11-13 mm; wing: 9.5-12 mm.

*Head:* White; fronto-orbital plate with golden pruinosity; vitta with almost the same width of parafrofrontal; 12-14 pairs of frontal setae, 1-2 pairs below the level of antennal insertion; frons with 0.25 of head width at the level of anterior ocellus; inner vertical setae crossed, outer verticals present; flagellomere brownish on outer surface and yellowish on inner; proboscis similar in length with head height; vibrissa long; 3-6 pairs of subvibrissal setulae; palpus similar in length with antenna and little swollen and curved upwards at tip.

*Thorax:* Scutum with golden pruinosity; acrostichals 2+1; dorsocentrals 2+3 or 3+3; intra-alars 1+3; post-pronotals 2; scutellum with one pair of basal setae; one pair of subapical setae and one pair of discal setae near apex; pleura covered with white pruinosity. Wing and calypter hyaline, vein  $R_1$  setulose basally on dorsal surface and vein  $R_{4+5}$  setulose from base almost to crossvein r-m on dorsal surface. Legs with coxa, trochanter and femur yellowish and tarsus brown; fore tibia with one anterodorsal row of short setae; 1 dorsal subapical seta; 1 posteroventral apical seta; mid femur with 1 anterior seta on middle third; 2-3 sparse posteroventral setae on basal half; 2 posterodorsal subapical setae; mid tibia with 1 strong anterodorsal and 1 strong ventral seta on middle third; 2 posterior setae



**FIGURES 22-26:** *Genea paulistana* sp. nov. **22.** Head, lateral view; **23.** Sternite 5; **24.** Epandrium, cerci and surstyli, posterior view; **25.** Epandrium, cerci and surstyli, lateral view; **26.** Aedeagal complex, lateral view. **Figures 27-28:** *Genea pellucens* (Curran), **27.** Head, lateral view; **28.** Wing, dorsal view.

on middle third; 1 anterodorsal subapical seta; 1 anteroventral, 1 ventral and 1 posteroventral apical seta; hind femur with 4-6 anteroventral setae on basal half and 1 seta on apical third; 4-6 posteroventral setae on basal half; hind tibia with one anterodorsal row of setae, the median one the largest; 3-4 ventral setae on middle third, the apical the largest; 1 anterodorsal and 1 posteroventral subapical seta; 1 ventral apical seta.

*Abdomen* (Fig. 29): Yellow;  $T_{1+2}$  not excavate to its hind margin;  $T_3$  and  $T_4$  with median apical brown spots dorsally;  $T_5$  shine yellow with brown spots laterally.

*Male terminalia*: Cerci large and not fused; surstylus shorter than cerci and with few sparse ventral setulae on the base; pregonite triangular in lateral view and postgonite narrow in lateral view.

*Female*: Unknown.

*Type material*: Holotype male. HONDURAS. Corocito, 03.iv.1924 [Curran Collection acc 31144] (AMNH).

*Other material examined*: MEXICO. Morelos, Cuerna vaca, 1 male, x.1944, Krauss, N.H.L. col. (USNM). GUATEMALA. La Providencia, O bispo, 1 male, 16.iv.1926, Aldrich, J.M. col. (USNM).

*Geographic distribution*: Honduras, Mexico, Guatemala (last two, new records).

*Comments*: The species appears as *Myobia* (?) *pellucens* in Curran (1934)'s key but a possible new combination is not formalized.

***Genea tenuirostris* (James, 1947)  
(Figures 29-30)**

*Dejeaniopalpus tenuirostris* James, 1947: 105 (description of male); Guimarães, 1971: 116 (catalogue).

*Genea tenuirostris*; Wood, 1987: 1264 (comb. nov.); O'Hara & Wood, 1998: 761 (comb. nov. formalized).

*Diagnosis*: Males and females with 2 pairs of proclinate orbital setae and 1 pair of reclinate orbital setae.

*Male*: Body length, 7.5-10.0 mm; wing, 6.5-9.0 mm.

*Head*: White; parafacial and vertex slightly golden; parafacial with 2/3 of the width of the flagellomere; vitta yellow; 5-8 pairs of frontal setae, 2-3 pairs below the level of the antennal insertion; frons with 0.45 of the head width at the level of the anterior ocellus; inner and outer verticals present; antenna yellow, flagellomere brown, yellow on base; arista slightly plumose; proboscis long, mentum with 1.5 times the head height (Fig. 29); median vibrissa; 4-7 pairs of subvibrissal setulae, shorter near vibrissa; 1-3 pairs of setulae above vibrissa; palpus exceptionally long with almost twice the length of the flagellomere.

*Thorax*: brown in ground colour with white and golden pruinosity; dorsocentrals 3+3; post-pronotals 2; scutellum with one pair of basal setae; one pair of subapical setae and one pair of weak discal setae near the apex; pleura yellowish on anterior half otherwise brown with white pruinosity and long yellow setulae. Wing and calypter hyaline; vein  $R_1$  entirely setulose on dorsal surface (few setulae apically on ventral surface) and vein  $R_{4+5}$  setulose from base to a little beyond crossvein r-m on dorsal surface (Fig. 30). Legs with coxa, trochanter, femur and tibia yellow, tarsus slightly brown; fore tibia with 1 strong posterior seta on middle third; 1 dorsal subapical seta; 1 posteroventral apical seta; claws and pulvilli short; mid femur with 1 anterior seta on middle third; 2-3 long and sparse posteroventral setae on basal half; 2 posterodorsal subapical setae; mid tibia with 1 long anterodorsal seta on middle third; 1 strong ventral seta on middle third; 2 posterior setae on middle third; 1 anterodorsal and 1 posterodorsal subapical seta each; 1 anteroventral, 1 ventral and 1 posteroventral long seta each; hind femur with 2 posterodorsal setae on apical third; 4-7 sparse posteroventral setae on basal half and 3-5 anteroventral setae on basal half and 1 seta on apical third; hind tibia with one posterodorsal row of setae; 3-4 ventral setae on middle third; 1 anterodorsal and 1 posterodorsal subapical seta each; 1 anteroventral apical seta.

*Abdomen*: Yellow;  $T_{1+2}$  not excavate to its hind margin; rounded median apical brown spot dorsally on  $T_3$  never surpassing the median line of this tergite and a triangular apical brown spot dorsally on  $T_4$ ; small brown spots laterally on  $T_3$  to  $T_5$ ; 1 pair of median marginal setae on  $T_{1+2}$  and  $T_3$ .

*Male terminalia*: not dissected.

*Female*: Differs from male as follows: median marginals on  $T_{1+2}$  absent, otherwise similar to male.

*Type material:* Holotype. MEXICO. Tapachula, 1 male, 17-19.viii.1943, Snyder, F.M. col. (AMNH).

*Other material examined:* BRAZIL. Amazonas: Manaus, Reserva Ducke, armadilha Malaise, 3 females, 01-10.iii.1995, Barbosa, M.G.B. col. (INPA).

*Geographic distribution:* Mexico, Brazil (new record).

***Genea trifaria* (Wiedemann, 1824)  
(Figures 31-35)**

*Stomoxys trifaria* Wiedemann, 1824: 41 (original designation); 1830: 250-251 (redescription).

*Genea maculiventris* Rondani, 1850: 173-174 (original designation); Aldrich, 1929: 13 (redescription); Townsend, 1931: 90 (junior synonym of the type species *Stomoxys trifaria*); Guimarães, 1971: 117 (catalogue – in synonymy with *G. trifaria*).

*Genea trifaria*; Townsend, 1931: 90 (comb. nov.); James, 1947: 114-115 (redescription); Guimarães, 1971: 117 (catalogue).

*Geneoglossa glossata* Townsend, 1935: 225 (original designation based on a single female). *Genea glossata*; James, 1947: 110 (key), 115 (comb. nov.; suggestion to be synonym of *G. trifaria*); Guimarães, 1971: 116 (catalogue). *N. SYN.*

*Male:* Body length, 7.0-8.0 mm; wing, 5.5-6.5 mm.

*Head:* White; fronto-orbital plate and vertex slightly gold; weak ocellars; inner and outer verticals present; eyes bare; vitta yellow; 10-12 pairs of frontal setae, 1-2 pairs below the level of the antennal insertion; frons with 0.25 of head width at the level of the anterior ocellus; antenna yellow, flagellomere brown, yellow on base; arista slightly plumose; 3-5 pairs of subvibrissal setulae, short near vibrissa; 1-2 pairs of setulae above the vibrissa; proboscis long with almost twice the head height; palpus exceptionally long with almost twice the length of the flagellomere (Fig. 31).

*Thorax:* Ground colour brownish with golden pruinosity; dorsocentrals 3+3; post-pronotals 2 or 3; scutellum yellow with one pair of basal setae, rarely with one pair of weak lateral setae; one pair of subapical setae and one pair of discal setae near the apex; pleura with golden pruinosity. Wing slightly infuscated; vein  $R_1$  entirely setulose on dorsal surface (Fig. 32) and vein  $R_{4+5}$  setulose dorsally from base to crossvein r-m. Legs yellow, hind tibia slightly brown and tarsus

brown; fore tibia with 1 long posteroventral seta on middle third; 1 dorsal subapical seta and 1 anteroventral, 1 ventral and 1 posteroventral apical seta; claws and pulvilli well developed; mid femur with 1 anterior seta on middle third; 1-2 posterodorsal setae on apical third; mid tibia with 1 strong anterodorsal seta on middle third; 1-2 sparse posterodorsal setae on middle third; 1 ventral seta on middle third; 1 anterodorsal and 1 posterodorsal subapical seta each and 1 anteroventral, 1 ventral and 1 posteroventral apical seta each; hind femur with one anteroventral row of setae on basal half and 1 seta on apical third; one posteroventral row of setae on basal half; 1-2 posterodorsal setae on apical third; hind tibia with 2-3 posterodorsal setae on middle third; 2-3 ventral setae on middle third, the apical the largest; 1 anterodorsal and 1 posterodorsal subapical seta; 1 anteroventral and 1 posteroventral apical seta.

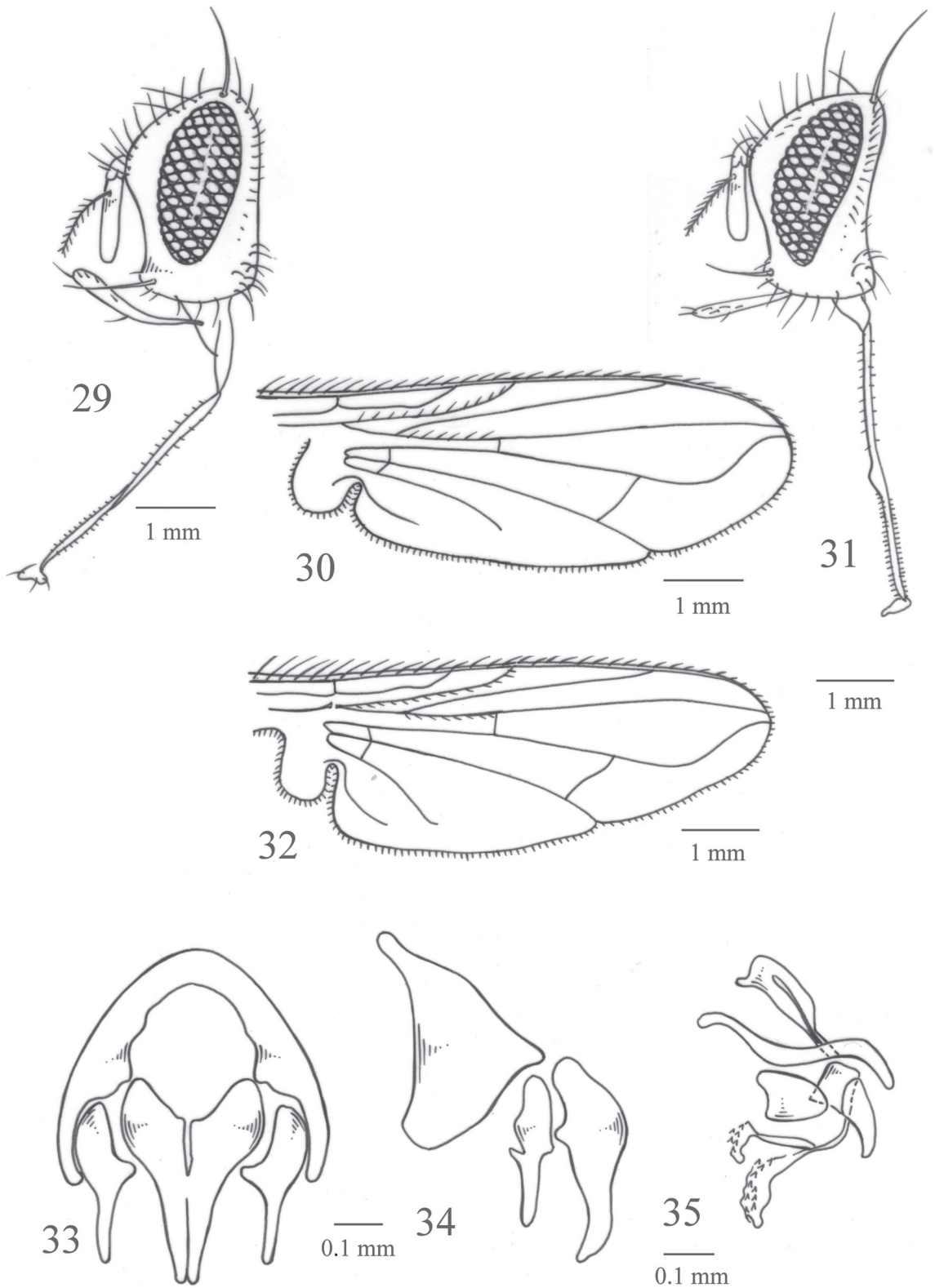
*Abdomen:* Yellow;  $T_{1+2}$  not excavate to its hind margin;  $T_{1+2}$  rarely with a median apical brown spot dorsally; triangular median apical brown spot dorsally on  $T_3$  surpassing the median line of this tergite; tip of the triangular median apical brown spot of  $T_4$  also surpassing the median line of this tergite; one pair of median marginal on  $T_3$  rarely on  $T_{1+2}$ ; narrow white pruinose band on the anterior margin of  $T_3$ ,  $T_4$  and  $T_5$ .

*Male terminalia* (Figs. 33-35): Sternite 5 as described for genus; cercal plate not fused and large, apex slightly curved backwards; surstylus shorter than cerci; distiphallus with lateral arms short; pregonite triangular in lateral view with few setulae apically; postgonite narrow in lateral view.

*Female:* Differs from male as follows: 2 pairs of proclinate orbitals and one pair of reclinate orbitals; frons with 0.35 of the head width at the level of the anterior ocellus; 7-10 pairs of frontal setae, claws and pulvilli short.

*Type material:* Holotype female of *G. glossata* (n57293). BRAZIL. Pernambuco: Tapera, 20.x.1932, *Geneoglossa glossata* Townsend (USNM).

*Other material examined:* BRAZIL, Pernambuco: Tapera, 1 male, 11.ix.1935 (USNM), Utingo, 1 male, v.1924, [on foliage] (USNM), Agrestina, Fazenda Amapá, 1 male, 11-17.vi.1971, ABC (MZSP); Rio de Janeiro: Nova Friburgo, Mury, 1 male, xii.1976, Gred & Guimarães, cols. (MZSP); Resende, Fazenda Penedo, 1 male and 2 females, 21.vii.1959, Lopes col.



**FIGURES 29-30:** *Genea tenuirostris* (James), 29. Head, lateral view; 30. Wing, dorsal view. **Figures 31-35:** *Genea trifaria* (Wiedemann), 31. Head, lateral view; 32. Wing, dorsal view; 33. Epandrium, cerci and surstyli, posterior view; 34. Epandrium, cerci and surstyli, lateral view; 35. Aedeagal complex, lateral view.

(MZSP); Angra dos Reis, Japuhya, 1 male, x.1934, Travassos, L. & Lopes, H.S. cols. (MZSP).

*Geographic distribution:* Honduras, Panama, Venezuela and Brazil.

*Comments:* The types of *G. trifaria* and *G. maculiventris* deposited respectively in the Zoological Museum, University of Copenhagen (ZMUC) and in the Museo e Instituto di Zoologia Sistemática dell'Università di Torino (MZUT), were not examined. The above description was based on the female type of *G. glossata* and on males examined by the authors.

## RESUMO

*As espécies neotropicais de Genea Rondani, 1850 (Diptera, Tachinidae, Tachininae, Leskiini) são revisadas através do exame do material-tipo de quase todas as espécies e um copioso material depositado em várias coleções científicas. G. australis (Townsend), G. brasiliensis (Townsend), G. gracilis James, G. jaynesi (Aldrich), G. major (Townsend), G. pellucens (Curran), G. tenuirostris (James), G. trifaria (Wiedemann) foram chaveadas e redescritas, com as primeiras descrições das terminálias masculinas. G. longipalpis (Wulp) não foi incluída nesse estudo, pois nenhum material foi examinado e os dados disponíveis são restritos a descrição original. G. glossata (Townsend) é proposta como sinônimo junior de G. trifaria. G. paulistana sp. nov. proveniente de São Paulo é proposta como uma nova espécie.*

**PALAVRAS-CHAVE:** Identificação; Chave; Morfologia; Revisão; Taxonomia.

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