The Subgenus Scaptia (Lepmia) Fairchild: Redescription of Females and Description of a Male (Diptera: Tabanidae: Pangoniinae)

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The subgenus Scaptia (Lepmia) Fairchild, known only from mountainous areas of Southeast of Brazil, is redescribed and illustrated. It is contrasted with similar species of Scaptia (Pseudoscione). It is more similar to the Australian Myioskaptia and Plinthina than to the other New World Scaptia subgenera.

Key words: horsefly - Scaptia (Lepmia) - taxonomy - Neotropical region

The genus Scaptia is represented in the Neotropical region by 4 subgenera: 3 of them recently revised: Pseudoscione (16 sp., Wilkerson & Coscarón 1984), Scaptia (10 sp., Coscarón & Wilkerson 1985), Pseudomelpia (1 sp., Coscarón & Gonzalez 2001); only Lepmia (2 species) remains unrevised. The species are found in the Southern Cone of South America, especially in the Neantarctic subregion. Genus Scaptia is also present in the Australian region with subgenera Pseudoscione (26 sp.), Scaptia (28 sp.), Myoscaptia (7 sp.), Plinthina (7 sp.), and Palimmeconyma (7 sp.) (Mackerras 1960).

The subgenus Lepmia Fairchild 1969 presently contains 2 species from Southeast of Brazil. As indicated by the author, the species are characterized by “a stout and heavily sclerotized proboscis with apices somewhat bulbous”. As with other Scaptia species, subgenus Lepmia are stout, moderately sized, with an inflated subshiny abdomen. Lepmia is also characterized by wide maxillary palps, front elongated and divergent below, wing faintly brown fumose with a yellowish hue accentuated on anterior border, genital cerci wider than long, with distal border concave, genital fork narrower basally, gonapophysis wider than long, and male with gradually acuminate gonostylus with blunt apex.

Lepmia shows great similarity with the other Scaptia subgenera (Coscarón & González 2001).

MATERIALS AND METHODS

The specimens studied were collected in the states of São Paulo and Rio de Janeiro and are deposited in the collections from Department of Entomology of Museu de Zoologia de São Paulo.

The study was made in accordance with the methodology of Coscarón and Gonzalez (2001).

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**Geographic distribution**: Southeast Brazil: Minas Gerais, Rio de Janeiro, São Paulo.

**Discussion**: The closest species is *seminigra* which has a longer palp, lighter scutum and abdomen, and is a little shorter. Our material is in agreement with the Wiedemann (1828) description, based on the *molesta* original description and the redescriptions of Lutz (1909) and Kröber (1930) of *Scaptia exeuns* (Walker), we accept *exeuns* as a synonym of *molesta*.

*Scaptia (Lepmia) seminigra* (Ricardo)
(re-description of the female and description of the male)

*Scaptia (Lepmia) seminigra*: Fairchild 1969: 203, 1971: 16, Fairchild and Burger 1994: 38

*Scaptia (Lepmia) molesta* female - Fig. 1: head. Figs 2-3: maxillary palp. Fig. 4: IX-X tergites and cerci.

*Diatomineura seminigra* Ricardo 1902: 432

*Melpia ferruginea* Enderlein 1925: 277, Fairchild 1966: 10, fig. 14

*Parosca ferruginea*: Kröber 1930: 188-189, fig. 31

A medium to large yellowish brown species with proboscis shiny blackish, labella wholly sclerotized, scutum and abdomen yellowish brown, and wing hyaline but slightly infuscated yellowish brown especially on the costal border. **Female**: body length 13-13.5 mm, wing length 12-13 mm, width 4.1-4.3 mm. Eyes greenish black iridescent (relaxed), with yellowish brown pilosity; front, subcallus, frontoclypeus, occiput, palp, yellowish light brown with concolorous pilosity; occiput with light gray pollinosity. Beard yellowish brown to dark brown.
Scaptia (Lepmia) seminigra, 8-10 female - Fig. 8: IX-X tergites and cerci. Fig. 9: VIII sternite and gonapophysis. Fig. 10: genital fork and spermatheca; 11-15 male - Fig. 11: head. Fig. 12: maxillary palp. Fig. 13: gonocoxite, basistyli, dististyli and aedeagus. Fig. 14: dististyli. Fig. 15: epandrium, ventral plate of proctiger and cerci. Fig. 16: S. (Pseudoscionoe) hibernus female: VIII sternite and gonapophysis (similar scale: 8, 9, 10, 13, 15)

depending on incidence of light. Front narrow, divergent below, ocellar tubercle slightly elevated, with 3 well developed ocelli (Fig. 6); front height 1.8-1.9 mm, width: at base 0.6-0.7 mm, at vertex 0.4-0.5 mm; frontal index 2.7-3; frontal basal divergence 1.2-1.3; antenna with pedicel narrower than scape and basal segment of flagellum. Palp wide, but narrower apically with anterobasal and posterior rim slightly elevated (Fig. 7). Proboscis a little longer than
head height (Fig. 5), with labella bulbous, very sclerotized. Scutum with hairs varying from yellowish golden to copper colored. Pleura, coxae and legs light yellowish brown; pleura with light gray pollinosity. Wing veins yellowish brown with hairs light brownish to blackish depending on light incidence. Fork and third vein (R₄₊₅) without appendix. Abdomen subshiny, darkened on posterior tergites, hairs yellowish golden to copper colored. Cercus wide with posterior border concave, IX tergite with abundant, black elongate hairs (Fig. 8). VIII sternite two times wider than long and gonapophysis broad with convex border (Fig. 9). Genital fork with narrow base and abundant microtrichiae on combs (Fig. 10).

Male: body length 11 mm, wing: length 10.6 mm, width 3.4-3.5 mm. Color similar to female, but slightly paler on scutum and abdominal terga than some females. Black violaceous greenish eyes (relaxed) with a slightly longer hairs than female, as also are frontoclypeus and beard hairs. Upper central facets not well differentiated from smaller lower facets. Ocellar tubercle raised above level of eyes, with three distinct ocelli and long hairs. Antenna as female, scape with longer hairs. Palp elongated with apex bare laterally (Fig. 12). Proboscis longer than head height (Fig. 11). Gonocoxite a little wider than basistyle length; dististyle pointed distally with blunt apex; aedeagus robust (Figs 13-14); epandrium elongated, gradually concave basally, ventral plate of proctiger narrow and cerci subtrapezoidal (Fig. 15).

Material examined: Brazil, São Paulo, Salesópolis, Est. Biol. Boraceia, 850 m, 29-VIII-61, col. Rabello, 1 female; Caraguatatuba, Res. Flor. 7/14-VII-62, col. Exp. Dep. Zool.: 1 female; São Paulo, Capital, I-1935, col. Pessoa: 1 female. Rio de Janeiro, Distr. Federal, V-1938, col. Serv. Febre Amarela, M.E.S. Brazil; Angra dos Reis, Fazenda Biol. Boraceia, 850 m, 29-VIII-61, col. Rabello, 1 female; São Paulo, Capital, I-1935, col. Pessoa: 1 female.

Geographic distribution: Southeast Brazil: Minas Gerais, Espirito Santo, Rio de Janeiro, and São Paulo.

Discussion: our material is in agreement with the Ricardo’s description, but body length is longer than his (11 mm). Specimens compared with the ferruginea holotype agree with it, and we are in accordance with Fairchild’s (1966) comments; molesta is differentiated especially by the short palp. Kröber’s ferruginea drawings show the front narrower basally and palp more elongated. Kröber (1934) also considered erroneously seminigra as a synonym of Fidena tabanipennis (Macquart).

Among the S. (Pseudoscione) species, the closest is S. (P.) hibernus Wilkerson & Coscarón 1984. Differences in palp shape, and that hair color on the frontoclypeus, gena, beard and pleura are dark brown mixed with grayish yellow, permit differentiation; in addition, the VIII sternite shape with pointed gonapophysis and a deep separation between them (Fig. 16), plus the elongate cercus shape without a distal concavity, also help to differentiate these species.

The closest species to molesta and seminigra in the Neotropics are S. (Pseudoscione) hibernus (Southeast Brazil), and latipalpis and subulipalpis (South Chile) (Wilkerson & Coscarón 1984).

It is possible to differentiate the Pseudoscione species by a relatively shorter front, maxillary palp apically acuminated, emarginated, often with a central depressed area, the labella more elongated and not very sclerotized, and gonapophysis more acuminated.

In contrast, the Australian Myoscaptia and Plinthisina species have, as does Melpia, the distal article of maxillary palp not acuminated, and female VIII sternite and gonapophysis wider with gradually rounded apical borders. This similarity is evidence of the close transantarctic relationship between the Scaptia faunas, with 2 Neotropical subgenera in common with Australia (S. (Scaptia) and S. (Pseudoscione), and another 3 subgenera endemic to each continent, all of them morphologically similar.

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