



<http://dx.doi.org/10.11646/zootaxa.4000.1.10>

<http://zoobank.org/urn:lsid:zoobank.org:pub:1397CBDF-5D74-4635-9DE6-27DA9FB53439>

### **A remarkable structure in a peculiar species of Sarcophagidae (Diptera): description of the male of *Lepidodexia (Harpagopyga) albida* Lopes**

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The subgenus *Harpagopyga* Aldrich has 15 nominal species, 14 from the Neotropical Region and one from the Nearctic Region (Pape 1996). The members of this subgenus are recognized by the following combination of characters: row of frontal setae ending level with the base of antenna, ocellar setae not differentiated, arista with plumosity reaching the apex or almost so, proepisternum with few setulae, 3 postsutural dorsocentral and 2 katepisternal setae, postalar wall bare, male midfemur without a ctenidium, phallus with juxta almost right-angled relative to the phallic tube, female tergite 6 well-developed, spermatheca with two differentiated portions (Lopes 1951; Pape 1996).

*Lepidodexia (Harpagopyga) albida* Lopes, 1951 was described based on four females and an unspecified number of first instar larvae from the state of São Paulo, southeastern Brazil. It was distinguished from its congeners by the narrow and whitish body, and details of the genital sternites, spermathecae and larvae (Lopes 1951).

Prior to this study, the species was recorded only from the type locality, an old and deactivated train station in Ilha Seca, once a malaria epidemic area in the 1940's. In 1990, this region was flooded by the Três Irmãos dam and it is now under the jurisdiction of the city of Pereira Barreto. After 60 years without new records, females and males of *L. (H.) albida* were collected in the state of Mato Grosso do Sul, and identified by comparison with the holotype and by its peculiar body coloration, as stressed by Lopes (1951) in the original description. The male is herein described and illustrated for the first time. Examination of the male terminalia revealed a unique feature on the dorsal surface of syntergosternite 7+8: a long and conspicuous projection whose function is still unknown. Although there is no additional evidence, the position of this structure suggests that it may be related to copulation. No male of any other *Harpagopyga* species, or even any other known species of Sarcophagidae, has a similar structure.

Specimens were collected in Malaise traps through the project Sisbiota–Diptera (CNPq/Fapesp), in the municipalities of Rio Verde, Corguinho, and Aquidauana (see material examined for further details), all in the state of Mato Grosso do Sul in midwestern Brazil, about 500 km west of the type-locality. Morphological terminology follows Cumming & Wood (2009), but the phallic terminology follows Mello-Patiu & Pape (2000) and Giroux *et al.* (2010). The material is housed in the entomological collections of Museu Nacional/UFRJ, Rio de Janeiro (MNRJ) and Museu de Zoologia/USP, São Paulo (MZSP).

#### ***Lepidodexia (Harpagopyga) albida* Lopes, 1951**

(Figures 1–6)

*Harpagopyga albida* Lopes, 1951: 287. Type locality: Brazil, São Paulo, Ilha Seca (currently municipality of Pereira Barreto).

**Description. Male** (Figs 1–4). Body length 11–14 mm (n = 3). **Head.** Fronto-orbital plate, parafacial plate, and postocular strip brown with pale silvery gray, slightly yellowish pruinosity. Parafacial plate with few sparse small setulae only on the upper part. Frontal vitta black; frons at vertex 0.30 x head width; frontal row of 7 setae reaching the base of antenna; ocellar setae not differentiated from ocellar setulae; one reclinate and no proclinate orbital setae; outer vertical seta not differentiated from postocular setae; inner vertical seta longer than the longest frontals. Gena with pale gray, slightly yellowish pruinosity, postgena without the yellowish hue, both with few black setae. Antenna brown with pale gray pruinosity, postpedicel about 2.0 x as long as pedicel, arista long plumose in basal 3/4. Palpus and proboscis pale brown. **Thorax.** Brown with pale silvery gray pruinosity; laterally the pruinosity is yellowish tinged and dorsally it is