

Neodexiopsis Malloch from Bolivia with the description of one new species (Diptera, Muscidae)

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ABSTRACT. *Neodexiopsis* Malloch from Bolivia with the description of one new species (Diptera, Muscidae). *Neodexiopsis* Malloch (Diptera, Muscidae, Coenosiinae) is a very well represented genus in the Neotropical Region, known from almost 100 species. In Bolivia, it is known only from four species: *N. declivis*, *N. incurva*, *N. oculata* and *N. recedens*, all described by Stein. The study of material from South America deposited at Muséum national d'Histoire naturelle (Paris, France), enabled the description of one new species to science. A key for the recognition of the five species known to Bolivia is given.

KEYWORDS. Morphology; Neotropical; taxonomy; new species.

RESUMO. *Neodexiopsis* Malloch da Bolívia com descrição de uma espécie nova (Diptera, Muscidae). *Neodexiopsis* Malloch (Diptera, Muscidae, Coenosiinae) é um gênero muito bem representado na região Neotropical, conhecido por quase 100 espécies. Na Bolívia, ele é conhecido por apenas quatro espécies: *N. declivis*, *N. incurva*, *N. oculata* e *N. recedens*, todas descritas por Stein. O estudo do material da América do Sul depositado no Muséum national d'Histoire naturelle (Paris, France), permitiu a descrição de uma nova espécie para a ciência. Uma chave para o reconhecimento das cinco espécies presentes na Bolívia é fornecida.

PALAVRAS-CHAVE. Morfologia; Neotropical; nova espécie; taxonomia.

Neodexiopsis Malloch is one of the muscid genera best represented in the Neotropical region. The Muscidae catalogue (Carvalho *et al.* 2005) listed 87 species and after its publication, nine other species were described (Costacurta *et al.* 2005), all from Paraná state (Brazil). In Bolivia, only 4% of the known *Neodexiopsis* fauna is represented. Probably this representation is much bigger, as the muscid fauna in this country is still very poorly known.

From the four species recorded to Bolivia, three are endemic – *N. declivis* (Stein, 1904; *N. incurva* (Stein, 1911) and *N. oculata* (Stein, 1911), while *N. recedens* (Stein, 1904) is recorded both to Bolivia and Peru.

The identification of the genus can be easily made using Carvalho & Couri (2002) key and its segregation from *Coenosia* Meigen and *Cordiluroides* Albuquerque, other two Coenosiinae genera morphologically similar, can be made by the presence of three preapical setae on hind femur (on anterodorsal, dorsal and posterodorsal surfaces) and by the glossiform shape of inferior calypter.

The aim of this paper is to describe one new species and give a key for the identification of the five *Neodexiopsis* species recorded from Bolivia.

MATERIAL AND METHODS

The material herein studied belongs to the collection of Muséum national d'Histoire naturelle (Paris, France), where

the holotype of the new species is deposited. The new species is based in two male specimens, collected in high altitude (3500 m).

The terminalia was macerated in a solution of 10% potassium hydroxide, and then boiled in a water-bath for ten minutes. It was then dissected in glycerol, drawn, stored in a microtube with glycerol, and attached to the pin bearing the specimen. The terminology of the descriptions followed McAlpine (1981).

RESULTS AND DISCUSSION

The four *Neodexiopsis* species recorded from Bolivia are known only by a few specimens almost restricted to the type-series and after their original descriptions, they were basically treated only in catalogues. The knowledge of their distribution in Bolivia is also very restricted as they are basically known from their type-localities: *N. declivis* was described based on two males from Sillutincara; *N. incurva* was described from Sorata, based on a couple collected during copulation and another male from Lorenzopata with some intraspecific variation (color and length of the bristles of the legs), *N. oculata* from Lorenzopata based on three males and one female, and *N. recedens* was originally described from Callanga, Peru, based on three males and five females, and later recorded to Bolivia by Stein (1911).

Pont (2001) presented notes on the types of *N. incurva* and *N. oculata*.

Key to the *Neodexiopsis* species recorded from Bolivia

1. Coxae yellow; frons projected; eyes small
 *N. recedens* (Stein)
- 1'. Coxae brown grey pollinose; frons a little projected or not; eyes normal sized 2
2. Femora and tibia yellow; fore femur with a comb-like series of setae on ventral surface (Fig. 1)
 *N. pectinifera* **sp. nov.**
- 2'. At least fore femur brown on apical half; fore femur with different chaetotaxy 3
3. Femora and tibiae all brown; tergite 5 with a "crown" of long setae on all its apical margin *N. declivis* (Stein)
- 3'. Legs mostly yellow, brown at most on apical half of femur 4
4. Antenna inserted above middle of eyes high, postpedicel not reaching oral margin, palpus dark brown, mesonotum with a median brown stripe *N. incurva* (Stein)
- 4'. Antenna not inserted above middle of eyes, but with postpedicel very long, reaching oral margin; palpus yellow; mesonotum with three large stripes ... *N. oculata* (Stein)

***Neodexiopsis pectinifera*, sp. nov.**

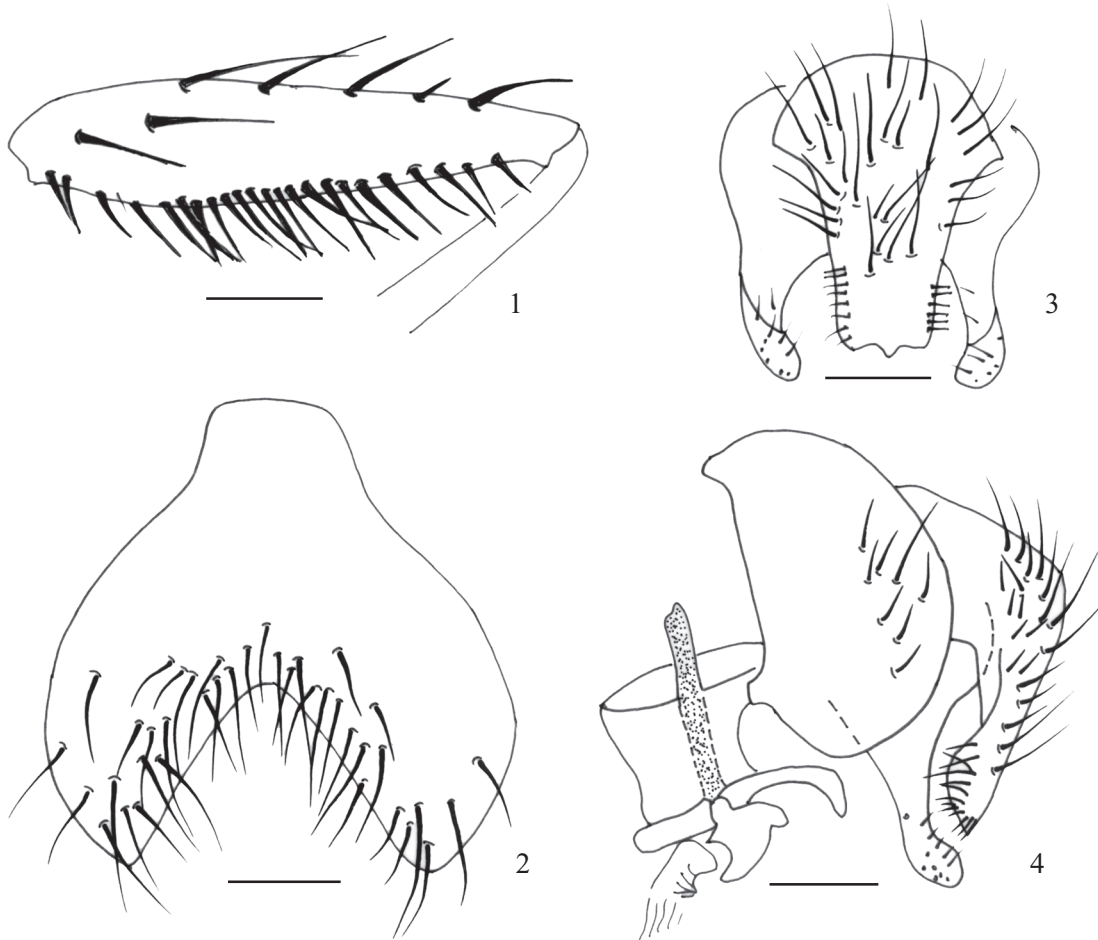
(Figs. 1–4)

Holotype male and one paratype male: Bolivia: Jungas de Palmar, 3500m, 1948, Zischkacd. Muséum Paris, coll. Duret, 788/93.

Male. Length: body: 3.3 mm; wing: 3.4 mm.

Colour: parafacial silver pollinose close to vertex, fronto-orbital plate and gena golden pollinose. Face and frons silver and golden pollinose. Antenna and arista dark brown. Palpus brown. Calypters uniformly whitish; halter yellow. Wing clear. Mesonotum brown with grey pollinosity and with five brown vittae, the one on dorsocentral surface, reaching the basal scutellar pair of setae. Pleurae brown, grey pollinose. Legs yellow, except coxae brown with grey pollinosity. Abdomen brown with grey pollinosity, with a median longitudinal brown stripe and small brown round clouds around the setae on tergite 5.

Head: eyes bare; distance of eyes about 0.40 of head width. Inner and outer vertical setae long. Frontal row with 4 pairs of long setae, the third one very long and crossed in middle and the upper one backwards directed. Ocellar setae very long and forwards directed a little divergent one from an-



Figs. 1–4. *Neodexiopsis pectinifera*, **sp. nov.**: 1, fore femur of male, lateral view; 2, sternite 5, dorsal view; 3, epandrium, cercal plate and surstili, dorsal view; 4, epandrium, cercal plate and surstili, lateral view. Scale bars: 1 = 1 mm, 2–4 = 0.2 mm.

other. Postpedicel about 2.8 times the length of the pedicel. Arista shortly pubescent.

Thorax: acrostichal setae distinct, more or less in 2 rows. Dorsocentrals 1+3. Presuturals 1; supra-alar 1; post supra-alar 1. Scutellum with two long pairs of setae, the basal one a little longer than the apical. Anepimeron with 4 long setae. Fore femur with 2 anterior setae on basal fourth, 4 sparsely anterodorsal setae and a complete row of comb-like setae on ventral surface, double series on basal half and all with same size (Fig. 1). Tibia on posterior surface with a long median seta; dorsal surface with a long seta on apical third; posterodorsal and posteroventral surfaces with an apical seta each. Mid femur with 2 anterodorsal setae on basal third, a median anteroventral and a sub-median anterodorsal; ventral surface with a complete series of strong setae; posterior surface with 2 preapical setae. Mid tibia with a long median posterior seta; ventral, anteroventral and posteroventral surfaces with an apical strong seta each. Hind femur with 5 long and spaced anterodorsal setae on all surface extension; anteroventral and posterodorsal surfaces each with a row of 7–8 setae on apical half. Hind tibia with a long median anterodorsal and posterodorsal setae, one medium-sized median anteroventral and a long dorsal preapical, followed by a shorter anterodorsal seta.

Abdomen: tergites 1+2 to 4 with two lateral pairs of setae; tergite 5 with a series of long setae on disc and on apex (Fig. 2).

Terminalia: Cercal plate, surstylus and phallic complex as in Figs 3 and 4.

Etymology: The name is derived from the Latin word *pecten*, meaning comb, and refers to the comb-like series of setae on ventral surface of fore femur.

Discussion: The species is easily distinguished from the others *Neodexiopsis* recorded from Bolivia, by the series of

setae on ventral surface of fore femur, all strong and same size, forming like a comb. The anteroventral and posterodorsal series of 7–8 setae on apical half of hind femur are also characteristic. Female is unknown.

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