A NEW *Notoschoenomyza* MALLOCH AND A KEY TO THE SPECIES (DIPTERA, MUSCIDAE, COENOSIINAE)

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(With 7 figures)

ABSTRACT

A new species of *Notoschoenomyza* Malloch, *N. diminuta* sp. nov. from Chile, is described and the male and female terminalia are illustrated. A key to the identification of all *Notoschoenomyza* species is presented.

Key words: Diptera, Muscidae, *Notoschoenomyza,* Coenosiinae, taxonomy.

RESUMO

Uma nova *Notoschoenomyza* Malloch e uma chave para as espécies (Diptera, Muscidae, Coenosiinae)

Nova espécie de *Notoschoenomyza* Malloch, *N. diminuta* sp. nov. do Chile, é descrita, as terminálias de macho e fêmea são ilustradas e uma chave para identificação de todas as espécies de *Notoschoenomyza* é apresentada.

Palavras-chave: Diptera, Muscidae, *Notoschoenomyza*, Coenosiinae, taxonomia.

INTRODUCTION

The neotropical genus *Notoschoenomyza* was erected by Malloch (1934) for two new species: *N. chrysiceps* from Chile and *N. sulfuriceps* from Uruguay. Malloch (1934) also transferred *Anthomyia immaculata* Walker, 1836 to this genus, presenting its redescription. A key to these three species is also included.

Carvalho *et al*. (1993) listed seven species for *Notoschoenomyza*: *N. annulata* Stein, 1911; *N. chrysiceps* Malloch, 1934; *N. costata* Snyder, 1957; *N. immaculata* Walker, 1836; *N. kuscheli* Hennig, 1955; *N. spinicosta* Stein, 1904, and *N. sulfuriceps* Malloch, 1934.

Couri & Pont (1999) presented a key to the genera of the Coenosiini of the world and included *Notoschoenomyza*. In the cladistic analysis of Coenosiini done by Couri & Pont (2000), four homoplasies were assigned to the genus: enlargment of palpus at apex; presence of an anterodorsal seta on fore tibia; presence of a supramedian posterodorsal seta on hind tibia; posterior concavity of cercal plate absent.

Couri & Carvalho (2002) presented a key to three species modified from Malloch (1934).

The purpose of the present paper is to describe one new species: *Notoschoenomyza diminuta* and to present a key for all known species.

MATERIAL AND METHODS

The material examined belongs to the Canadian National Collection of Insects, Ottawa, Canada (CNC), as well as to the *Museu Nacional*, Rio de Janeiro, Brazil (MNRJ).

The terminalia of the holotype and of the female paratype were prepared in a solution of potassium hydroxide at 10%, and in a water-bath for ten minutes. They were then dissected in glycerol and drawn and

packed in a microtube with glycerol and fixed to a straight pin together with the specimen.

***Notoschoenomyza diminuta* sp. nov.**

Diagnosis. Palpus yellow, frons and face golden, antennae dark brown, apex of femur and base of the tibia reddish-brown.

Colour. Brown with grey pollinosity. Head with frons, face, fronto-orbital plate, and gena golden; antenna, arista, ocellar triangle, and occiput dark brown; palpus yellow. Mesonotum with four brown stripes at dorsocentral and intra-alar row of bristles. Calypters white; haltere yellow; wing brownish with brown veins. Legs brown with grey pollinosity, apex of femur and base of tibia reddish brown; pulvillus white; claw black.

Length. Male: Body: 2.7 mm to 3.4 mm

Wing: 2.6 mm to 2.9 mm

Head. Eye facets of same size. Four pairs of strong frontal setae with short and fine setae inserted between them, the upper reclinate. Inner vertical seta strong, long, and convergent. Outer vertical seta strong, long, and divergent. Ocellar seta strong, long, and divergent. Postocellar seta fine, small, and divergent. Arista bare. Vibrissa strong and long; 1-2 supravibrissal setulae.

Thorax. Acrostichal setulae ciliform; dorsocentrals setae 1:3; 2 humerals; 1 post-humeral; 1 presutural and 2 post-sutural intra-alars; 2 supra-alars. Scutellum with one pair of basal and two pairs of apical bristles strong, all long and convergent. Notopleuron with two bristles, the anterior longer. Anepisternum with a row of 5-7 bristles. Fore femur with a row of anterodorsal and ventral bristles. Fore tibia with a median anterior and posterior bristles, a pre-apical dorsal and an apical anteroventral; pretarsi with a basal ventral bristle measuring about less than the sum of length of the remaining tarsomeres; claws and pulvillus developed. Mid femur with a row of anterior bristles, a ventral bristle on basal third, 1-3 anteroventral bristles on basal third and a preapical posterodorsal bristle. Mid-tibia with supramedian and submedian anterodorsal bristles; supramedian, median, and preapical posterodorsal bristles, a preapical dorsal bristle, and an apical anteroventral, ventral, posteroventral, and anterior bristles; tarsi. Hind femur with an irregular row of anterodorsal and anteroventral bristles and preapical dorsal bristle. Hind tibia with a supramedian, median, and prepical anterodorsal bristles; supramedian and median posterodorsal bristles; submedian and median (in some specimens) anteroventral bristles, a preapical dorsal bristle, and an apical ventral; tarsi.

Abdomen. Tergites 2-5 with lateral strong bristles. Tergites 4 and 5 with a row of apical bristles. Sternite 5 with anterior concavity strong (Fig. 1).

Terminalia. Cercal plate longer and fine, anterior margin with a deep incision and posterior margin with a shallow incision. Surstyli with round apex (Figs. 2, 3). Hypandrium tubular and long (Fig. 4).

Female: Length. Body: 3.8 mm

Wing: 3.0 mm

Differs from male only in the median bristle in hind tibia, which is stronger than in the male.

Terminalia. Ovipositor long with microtrichia throughout extension; 3 spermathecae (Figs. 5-7).

Etymology. The epithet refers to the small size of the species in comparison with the other congeneres.

Material examined: Holotype male: Chile. Magellanes. Lag. Amarga, Natales. E. of Mt. Payne. 200 m, 14-20.xii.60, Pena. Holotype (CNC). Specimen with right hind leg agglutinate in tag, abdomen in glycerol.

Paratypes: 1 female and 2 males: CHILE. Chile Chico. Lag. Buenos Aires. Aysen, 24-31.xii.60, Pena. Paratype: female without mid-legs (one of them agglutinate in tag), male without left foreleg. 6 males: same label as holotype, 3 specimens (MNRJ) and 3 specimens (CNC). 1 male: CHILE. S. Porvenir. N. Bahia. Inutil. Tidel Fuego, 6-7.xii.60, Pena. Paratype (CNC).

Key to* Notoschoenomyza *species

1. Palpus fulvous to yellow, sometimes base darker (*N. costata*).....2

Palpus black 6

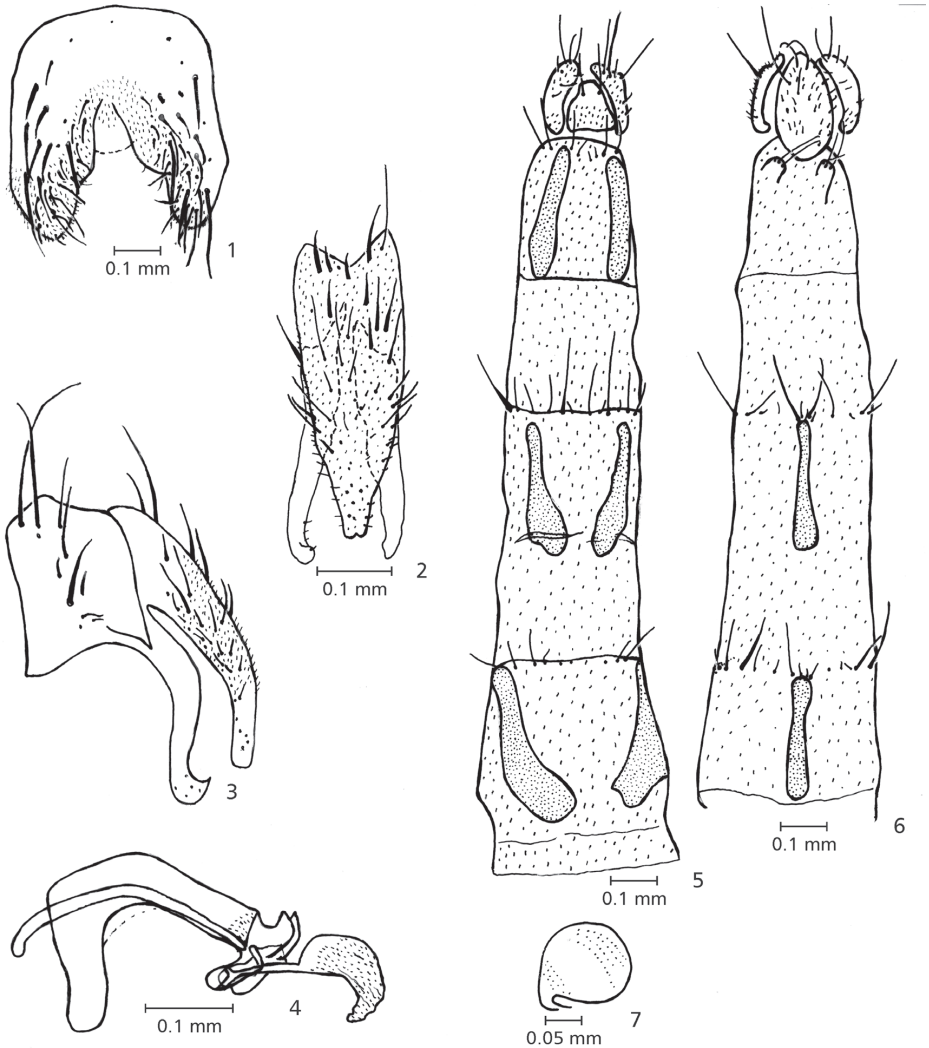
2. All tibia reddish-yellow.....3

Tibia dark brown, sometimes reddish yellow at apex or base.....5

3. Hind tibia with 2 anteroventral bristles on middle third.....4

Hind tibia with only 1 anteroventral bristle on middle third .....*N. costata* Snyder, 1957 [Argentina]

4. Antenna with pedicel reddish, contrasting with black flagellomere.....*N. annulata* (Stein, 1911) [Peru]



Figs. 1-4 — Male terminalia; 1: sternite 5, dorsal view; 2: cercal plate and surstyli, lateral view; 3: cercal plate and surstyli, dorsal view; 4: phallic complex, lateral view. figs. 5-7: female terminalia; 5: ovipositor, dorsal view; 6: ovipositor, ventral view; 7: spermatheca.

Antenna all dark-brown.....*N. kuscheli* Hennig, 1955 [Juan Fernandez Is.]

5. Gena silver pollinose, all tibia reddish-yellow at apex; abdomen with a pair of large dark subtriangular spots on each tergite .....*N. chrysiceps* Malloch, 1934 [Chile]

Gena golden pollinose; tibiae dark-brown at apex; abdomen with no mark.....*N. diminuta* sp. nov. [Chile]

6. Face golden pollinose; anterior trochanter reddish (not very visible)….....*N. spinicosta* (Stein, 1904) [Peru, Bolivia]

Face silver pollinose or brown; anterior trochanter dark-brown.....7

7. Pale grey dusted species; abdomen entirely grey dusted and dull, with a dark dorsocentral line on all tergites and two pairs of dark spots on tergites 3-5, only the inner one visible from above, tergite 6 with a large discal black spot..... *N. sulfuriceps* Malloch, 1934 [Uruguay]

Dark species; abdomen with grey dust broken up on dorsum, surface distinctly shining, the dark central line and lateral spots not sharply defined .....*N. immaculata* (Walker, 1836) [Argentina]

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