

## Article

urn:lsid:zoobank.org:pub:6615716D-7A12-41DC-963E-2E385D12A411

### Taxonomy of *Neomuscina* Townsend (Diptera, Muscidae) from Brazil

ALESSANDRE PEREIRA-COLAVITE<sup>1</sup> & CLAUDIO J. B. DE CARVALHO<sup>1</sup>

<sup>1</sup>Departamento de Zoologia, Universidade Federal do Paraná, C.P. 19020, Curitiba, Brazil, CEP 81.531-980.  
E-mail: neneco@gmail.com, cjbcarva@ufpr.br

#### Abstract

*Neomuscina* Townsend includes 41 species distributed throughout the Nearctic and Neotropical Regions. Although the genus has a large number of species, it has been ignored and its taxonomy is confusing and has many flaws. In this work we analyzed the following species recorded for Brazil: *Neomuscina atincta* Snyder, *N. atincticosta* Snyder, *N. capalta* Snyder, *N. currani* Snyder, *N. douradensis* Lopes & Khouri, *N. goianensis* Lopes & Khouri, *N. inflexa* (Stein), *N. instabilis* Snyder, *N. mediana* Snyder, *N. mimosae* Lopes & Khouri, *N. neosimilis* Snyder, *N. nigricosta* Snyder, *N. paramediana* Lopes & Khouri, *N. pictipennis pictipennis* (Bigot), *N. ponti* Lopes & Khouri, *N. sanespra* Snyder, *N. schadei* Snyder, *N. similata* Snyder, *N. stabilis* (Stein), *N. transporta* Snyder, *N. vitoriae* Lopes & Khouri and *N. zosteris* (Shannon & Del Ponte). *Neomuscina nigricosta* and *N. transporta* are new distribution records for Brazil. Three new species are described: *Neomuscina anajeensis* sp. nov. from Anagé (Bahia), *Neomuscina maculata* sp. nov. from Botelhos (Minas Gerais) and *Neomuscina snyderi* sp. nov. from Mata de São João (Bahia). An identification key based on the morphological characters of both male and female is provided. Species distributions are discussed and updated, and the number of species now recorded for Brazil is 29.

**Key words:** forensic interest; identification key, Neotropical Region; public health, revision

#### Resumo

*Neomuscina* Townsend comprehende atualmente 41 espécies distribuídas pelas Regiões Neártica e Neotropical. Embora o gênero contenha um elevado número de espécies, por muito tempo este permaneceu ignorado, apresentando-se hoje com uma taxonomia confusa e negligenciada. Neste trabalho as seguintes espécies com registro para o Brasil foram analisadas: *Neomuscina atincta* Snyder, *N. atincticosta* Snyder, *N. capalta* Snyder, *N. currani* Snyder, *N. douradensis* Lopes & Khouri, *N. goianensis* Lopes & Khouri, *N. inflexa* (Stein), *N. instabilis* Snyder, *N. mediana* Snyder, *N. mimosae* Lopes & Khouri, *N. neosimilis* Snyder, *N. nigricosta* Snyder, *N. paramediana* Lopes & Khouri, *N. pictipennis pictipennis* (Bigot), *N. ponti* Lopes & Khouri, *N. sanespra* Snyder, *N. schadei* Snyder, *N. similata* Snyder, *N. stabilis* (Stein), *N. transporta* Snyder, *N. vitoriae* Lopes & Khouri and *N. zosteris* (Shannon & Del Ponte). *Neomuscina nigricosta* e *N. transporta* são apresentadas como novos registros para o Brasil. Três novas espécies são descritas: *Neomuscina anajeensis* sp. nov. de Anagé (Bahia), *Neomuscina maculata* sp. nov. de Botelhos (Minas Gerais) e *Neomuscina snyderi* sp. nov. de Mata de São João (Bahia). Uma chave de identificação, baseada em caracteres morfológicos de machos e fêmeas, é apresentada. Dados sobre a distribuição das espécies são também discutidos e atualizados, registrando agora para o Brasil 29 espécies.

**Palavras-chave:** interesse forense; chave de identificação; Região Neotropical; saúde pública; revisão

#### Introduction

*Neomuscina* Townsend, 1919 includes 41 species distributed throughout the Nearctic and Neotropical regions. *Neomuscina tripunctata* (Wulp, 1896) and *N. rufoscutella* Dodge, 1955 are the only species found in the Nearctic Region, and *N. transporta* Snyder, 1949, was collected in an airplane that landed in Accra, Ghana, coming from South America (Snyder 1949). Before the present study, 24 species had been recorded from Brazil, some of which were only known from the type-locality (de Carvalho *et al.* 2005; Rodríguez-Fernández *et al.* 2006).