

Article



The synonymies of *Dolichopus lepidus lepidus* Staeger, 1842 — demasculinisations, lectotype designations and a *nomen oblitum* (Diptera, Dolichopodidae)

CHRISTOPH GERMANN^{1,5}, JERE KAHANPÄÄ², MARC POLLET³, LUCIA POLLINI⁴ & MARCO VALERIO BERNASCONI¹

¹Zoological Museum, Institute of Evolutionary Biology and Environmental Studies, University of Zürich, Winterthurerstrasse 190, CH-8057 Zürich, Switzerland

Abstract

Type material of all synonyms of *Dolichopus lepidus lepidus* Staeger, 1842 was examined, except for *D. dissimilipes* Zetterstedt, 1843 where no type material was available. Lectotype specimens are designated for *D. lapponicus* Becker, 1917 and *D. uliginosulus* Dyte, 1980. The previously proposed, but not directly verified synonymy of *D. lapponicus* with *D. lepidus* is here confirmed. Two junior synonyms—*D. lapponicus* and *D. cruralis*—were provoked by nematode infections that lead to demasculinisation of the males, which mislead former authors in their descriptions. Demasculinised specimens of the junior synonyms are depicted. To stabilize nomenclature, we propose *Dolichopus lepidus* as *nomen protectum*, and the senior synonym but forgotten name *D. tibialis* Zetterstedt, 1838 as *nomen oblitum*. We provide insights into the historical background of the Zetterstedt name, based on remarks by Loew on Zetterstedt's descriptions. Additionally, nematodes were found for the first time in specimens of *Dolichopus lepidus lepidus* Staeger, 1842 from the Alps, and in specimens of *Dolichopus urbanus* Meigen, 1824, and *D. subpennatus* d'Assis Fonseca, 1976 from lowlands (Belgium). Nematode-infected specimens of *Dolichopus* spp. were previously reported exclusively from Scandinavia, and a boreomontane distribution was then suggested.

Key words: taxonomy, lectotype, synonymy, nomen protectum, parasite, Nematoda

Introduction

Dolichopus Latreille, 1796 is one of the most species-rich genera within Dolichopodidae with 580 species described worldwide (Yang et al. 2006; but see also Sinclair et al. 2008). The Old World Dolichopus lepidus Staeger, 1842 presently contains two subspecies. The nominal subspecies D. lepidus lepidus Staeger, 1842 is widely distributed in the Palaearctic and Oriental regions (Yang et al. 2006), whereas D. lepidus microstigma Stackelberg, 1930 was described, and presently solely known from Russia.

Recently, Kahanpää (2008) synonymized several *Dolichopus*-species, among them *D. cruralis* Wahlberg, 1850 with *D. lepidus*. These synonyms were originally thought to be separate species but were misidentifications, the authors being misled by specimens that possessed a nematode infection, which modified mostly the male's primary (hypopygium) and secondary sexual characters (on legs, wings, heads). These modifications, referred to as "demasculinisation" or "intersexualism", were hitherto primarily reported from nematocerous Diptera such as Culicidae, Ceratopogonidae and Chironomidae. Especially Chironomidae show similar alterations of the males in tarsal, antennal and wing characters (Wülker 1965).

²Pihlajatie 25 A 15, FI-00270 Helsinki, Finland

³Information and Data Center (IDC), Research Institute for Nature and Forest (INBO), Kliniekstraat 25, B-1070 Brussels, Belgium

⁴Museo Cantonale di Storia Naturale, Viale Cattaneo 4, CH-6900 Lugano, Switzerland

⁵Corresponding author. E-mail: germann.christoph@gmail.com