



<http://dx.doi.org/10.11646/zootaxa.4059.3.9>

<http://zoobank.org/urn:lsid:zoobank.org:pub:B2ED2D63-8DDB-4822-8CFB-F2FE6873D75D>

Linnaemya bergstroemi n. sp. (Diptera: Tachinidae)—a new parasitoid fly from the Finnish Lapland

JAAKKO POHJOISMÄKI¹ & ANTTI HAARTO²

¹University of Eastern Finland, Department of Biology, P.O. Box 111, FI-80101 Joensuu, Finland. E-mail: jaakko.pohjoismaki@uef.fi

²Zoological Museum, Section of Biodiversity and Environmental Science, University of Turku, FI-20014 Turku, Finland.

E-mail: ahaarto@gmail.com

Abstract

A new tachinid species, *Linnaemya bergstroemi* n. sp., is described from the Finnish Lapland. The new species closely resembles the Nearctic species *Linnaemya anthracina* Thompson, but can be readily distinguished from it by the characters described in this paper. The taxonomic placement of the two species is discussed in the light of morphological and *CoI* sequence similarities with *Linnaemya* Robineau-Desvoidy species in the subgenera *Ophina* Robineau-Desvoidy and *Bonellimyia* Townsend. Known aspects of the new species' biology and distribution are reviewed.

Key words: Species diversity, *CoI*, DNA barcodes, Holarctic, Finland, Tachininae, Linnaemyini, Tachinini, Ernestiini, *Ophina*, *Bonellimyia*

Introduction

The genus *Linnaemya* Robineau-Desvoidy belongs to the Tachininae subfamily of tachinid parasitoid flies and has been traditionally assigned to its own tribe, the Linnaemyini (Herting & Dely-Draskovits 1993). While O'Hara & Wood (2004) placed the genus within a largely redefined tribe Ernestiini, a recent detailed phylogenetic analysis groups *Linnaemya* together with *Germaria* Robineau-Desvoidy as a sister clade of the Tachinini (Cerretti *et al.* 2014). Better support for either of these assignments is likely to be obtained only from a comprehensive molecular phylogenetic analysis as has been the case for a number of other dipteran families, such as the closely related Calliphoridae (Marinho *et al.* 2012).

Linnaemya is a subcosmopolitan genus (O'Hara 2014) that is especially species-rich in the African continent with more than 60 described species (Crosskey 1984). Only seven species are known from the Nearctic Region (O'Hara & Wood 2004). Of the 21 European species (Tschorsnig *et al.* 2004; Pape *et al.* 2015), four were known from Finland prior to this study: *L. haemorrhoidalis* (Fallén), *L. olsuffjevi* Zimin, *L. rossica* Zimin and *L. vulpina* (Fallén) (Pohjoismäki & Kahanpää 2014). The species described in this paper, *Linnaemya bergstroemi* n. sp., was discovered in 1997 and 2001 as part of a rearing study of the arctic-alpine tiger moth *Pararctia lapponica* (Thunberg) (Lepidoptera: Erebidae: Arctiinae) and is the only *Linnaemya* whose distribution currently extends north to the Finnish Lapland.

Material and methods

Abbreviations of specimen and DNA sequence depositories

BIO	Biodiversity Institute of Ontario, University of Guelph, Canada.
BOLD	Barcode of Life Data Portal, www.barcodinglife.com
CNC	Canadian National Collection of Insects, Arachnids and Nematodes, Ottawa, Canada.