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## Review of the genus *Abiskomyia* Edwards (Diptera: Chironomidae: Orthocladiinae), with description of new taxa from the Russian Far East and bordering territories

EUGENYI A. MAKARCHENKO<sup>1</sup> & MARINA A. MAKARCHENKO

*Institute of Biology and Soil Sciences, Russian Academy of Sciences, Far East Branch, 100 let Vladivostoku Avenue 159, Vladivostok 690022 Russia. E-mail: makarchenko@biosoil.ru; emakarchenko@mail.ru*

<sup>1</sup>Corresponding author

### Abstract

A systematic review of the genus *Abiskomyia* Edwards, 1937 is presented based on materials from the Russian Far East and bordering territories. Three new species: *A. korbokhon* **sp. nov.**, *A. levanidovi* **sp. nov.**, *A. rivalis* **sp. nov.** and one subspecies *A. virgo orientalis* **subsp. nov.** are described and figured. Emended generic diagnoses and keys to determination of adult males, pupae and fourth instar larvae of all known species and subspecies of the *Abiskomyia* of the Palaearctic region are provided.

**Key words:** Chironomidae, Orthocladiinae, *Abiskomyia*, new species and subspecies, key, review, Russian Far East

### Introduction

The genus *Abiskomyia* Edwards, 1937 was established by monotypy for *Abiskomyia virgo* Edwards, which was described on the basis of the adult female from the area of Abisko, Swedish Lapland (Edwards 1937). At the same year, the pupa of this species was described (Thienemann 1937), and later the second species—*A. paravirgo* Goetghebuer, known from the adult male (Goetghebuer 1940), pupa and larva (Thienemann 1941) was included into the genus. After that, only one reference on finding a probable new species in the Nearctic region was published (Oliver 1981), but no comprehensive taxonomic revision of this genus has been performed so far. The exception is the Lindeberg's research (1974), in which a description of the adult male of *A. virgo* from the type locality is given, as well as the important taxonomic notes on populations of this species from Canada (Oliver 1963) and Russia (Pankratova 1970). In particular, Lindeberg (op. cit.) remarked that Pankratova (1970) misidentified *A. paravirgo* and *A. virgo*. It is true, in a key-book of Pankratova (1970) features of these two species and larval form of "Orthocladiinae gen.? l. *simulans* Tshernovskij (Chernovskii 1949)" were incorrectly combined. This mistake resulted in wrong definition of the *Abiskomyia* species from Russia, including the species from the Baikal Lake basin, which was incorrectly ascribed to *A. virgo* (Linevich *et al.* 2002).

In this paper we present a systematic revision based mainly on materials from the Russian Far East and partly from Eastern Siberia, as well as the Lindeberg's (1974) material from Finnish Lapland (adult males and pupae of *A. virgo*). As a result of our study, three new species: *A. korbokhon*, *A. levanidovi*, *A. rivalis* and one new subspecies: *A. virgo orientalis*. from the Russian Far East and bordering territories are described and figured. Additions and corrections to generic diagnoses for adult male and immature stages are given. Keys to adult males, pupae and fourth instar larvae of the *Abiskomyia* species and subspecies known from the Palaearctic region are also provided. Unfortunately, due to lack of the source material from the Baikal Lake basin by Linevich *et al.* (2002), and the very short uninformative description of the adult male named as "*A. virgo*", we could not identify the species with any certainty, thus it could not be included in this work; neither we did not have a possibility to examine the holotype (adult male) of *A. paravirgo* that is apparently lost.

Our results should be considered as the first step towards the revision of the genus *Abiskomyia* of the Palaearctic region, which is still necessary to be extended to cover the whole area of the Holarctic region.

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