

<https://doi.org/10.11646/zootaxa.4394.3.8>

<http://zoobank.org/urn:lsid:zoobank.org:pub:EF77EA75-2056-41E1-B1DF-4BDAD1749621>

***Cladotanytarsus saetheri* sp. nov. and *C. gedanicus* Gilka: Holarctic sibling species (Diptera: Chironomidae)**

MATEUSZ PUCHALSKI¹, LAURI PAASIVIRTA² & WOJCIECH GIŁKA^{1,3}

¹University of Gdańsk, Faculty of Biology, Department of Invertebrate Zoology and Parasitology, Laboratory of Systematic Zoology;
Wita Stwosza 59, 80–308 Gdańsk, Poland

²Tahkonkatu 12, 24100 Salo, Finland

³Corresponding author. E-mail: wojciech.gilka@biol.ug.edu.pl

Abstract

Cladotanytarsus saetheri, sp. nov., a widely distributed species (Fennoscandia; Russia: Far East; Canada: Manitoba; USA: Colorado, Michigan, South Carolina, Wisconsin) is described and compared with *C. gedanicus* Gilka, 2001 on the basis of new records (Fennoscandia; Canada: Manitoba, Nunavut; USA: Colorado, New Mexico). Intraspecific morphological variability of adult males is presented in order to delimit the two previously misidentified species.

Key words: Diptera, Chironomidae, *Cladotanytarsus*, systematics, new species, Holarctic

Introduction

Recent studies indicate that *Cladotanytarsus* Kieffer, 1921 is one of the most species-rich genera within the large chironomid tribe Tanytarsini (Puchalski & Gilka 2017a, b; Puchalski *et al.* 2017). The two *Cladotanytarsus* subgenera, *Lenziella* Kieffer, 1922 and *Cladotanytarsus s. str.*, include at least 7 and 71 species respectively; the former subgenus known from the Northern Hemisphere, and the latter from all continents except Antarctica. However, diagnosing the *Cladotanytarsus* poses a challenge due to both intrageneric morphological homogeneity and intraspecific variations. Many *Cladotanytarsus* species require redescription, several specific names remain in original combinations and need generic transfer or are synonyms introduced on the basis of materials from distant regions studied apart, as it has been indicated recently by Puchalski & Gilka (2017a). With the exception of several species, mainly those coming from Europe, most of *Cladotanytarsus* are known as to be recorded from a single country/region or have not been found outside *terra typica*. On the other hand, many species remain not described.

Our present study is focused on a new species, a description of which is based on a series of specimens recorded from sites distributed across the Holarctic region: Fennoscandia, the Russian Far East, Canada and the USA. All the examined specimens are recognized as conspecific on the basis of the hypopygium structure, as well as the wing venation pattern and thorax chaetotaxy. This new species is compared with *Cladotanytarsus* (*C.*) *gedanicus* Gilka, 2001, now for the first time recorded from the Nearctic region, and intraspecific morphological variations in adult males of these two relatives are presented to prevent further misidentifications.

Material and methods

The examined specimens were collected using a sweep net, Malaise, light and emergence traps and by netting water surface. Most of the individuals were slide-mounted in Canada balsam or Euparal. Measurements are in μm ; lengths of leg segments and palpomeres were rounded off to the nearest 5 and 1 μm respectively; the antennal, leg and venarum ratios (AR, LR, VR) were calculated to the second decimal place. The morphological terminology and abbreviations follow Sæther (1980). The photographs were taken using a Leica DM6000 microscope and LAS