



## Distribution and new synonymy in European biting midges of the genus *Dasyhelea* Kieffer (Diptera: Ceratopogonidae)

PATRYCJA DOMINIAK & RYSZARD SZADZIEWSKI

Department of Invertebrate Zoology, University of Gdańsk, Al. Marszałka Piłsudskiego 46, 81-378 Gdynia, Poland.

E-mail: heliocopris@gmail.com

### Abstract

We present a review of distribution and new synonymy of the 63 valid species of biting midges in the genus *Dasyhelea* occurring in Europe. New distribution records, mostly from Ukraine and Romania, are provided. *Dasyhelea alonensis* (Strobl), *D. mayor* (Strobl), *D. decoratissima* (Strobl) and *D. bilineata* Goetghebuer are redescribed and interpreted. Seventeen **NEW SYNONYMS** are proposed for the following species: *Dasyhelea modesta* Winnertz (= *D. inclusa* Kieffer), *D. mayor* (Strobl) (= *D. aperta* Goetghebuer & Timon David, *D. wuelkeri* Mayer), *D. bilobata* Kieffer (= *D. luteiventris* Goetghebuer, *D. spiralis* Remm), *D. bilineata* Goetghebuer (= *D. insignipalpis* Kieffer, *Tetrastoma saxicola* Edwards, *D. geleiana* Zilahi-Sebess, *D. montana* Zilahi-Sebess, *D. lithotelmatica* Strenzke, *D. tecticola* Remmert, *Culicoides dieuzeidei* Vaillant, *D. karelica* Glukhova & Brodskaya), *D. dampfi* Kieffer (= *D. estonica* Kieffer), *D. turficola* Kieffer (= *D. malibui* Yu), *D. turanicola* Remm & Nazarmukhamedov (= *D. serrata* Navai), *D. corinneae* Gosseries (= *D. chonetus* Yu & Zou). *Dasyhelea furva* Remm is removed from synonymy with *D. bifida* Zilahi-Sebess and *D. alonensis* (Strobl) removed from synonymy with *D. flavoscutellata* (Zetterstedt). *Ceratopogon aristolochiae* Rondani is transferred from the genus *Dasyhelea* to the genus *Forcipomyia* (**comb. nov.**) and recognized as a new senior synonym of *Forcipomyia brevicubita* Goetghebuer and *F. pontica* Remm (**syn. nov.**). Lectotypes are designated for *Dasyhelea alonensis* (Strobl), *D. mayor* (Strobl), *D. decoratissima* (Strobl) and *Forcipomyia aristolochiae* (Rondani). *Dasyhelea longituba* Kieffer, *D. strigosa* Kieffer, *D. neobifurcata* Wirth and *D. paragrata* Remm are excluded from the European fauna. In addition, we provide a list of 17 doubtful species (*nomina dubia*) described from Europe and one *nomen nudum*.

**Key words:** Diptera, Ceratopogonidae, *Dasyhelea*, biting midges, distribution, redescriptions, new synonyms, new records, Europe

### Introduction

*Dasyhelea* Kieffer, 1911 is a large and complex genus of biting midges (Diptera: Ceratopogonidae) containing some 590 species worldwide that is moderately well known for most regions but still in need of a revision. Eighty one were reported from Europe, including the Canaries (Szadziewski & Borkent 2004). Early workers described numerous species from Europe based mainly on coloration as well as other features which have little or no diagnostic value and many older types are lost. There are also problems with the interpretation of the species described only from females. Recently, some catalogs and national check lists have included species names that were not provided with detailed locality data from several countries. We regard these country reports as invalid for faunistic purposes. Many of these reports are in the Catalogue of Palaearctic Diptera (Remm 1988), check lists from Finland (Hackman 1980), Germany (Havelka & Aguilar 1999), Denmark (Petersen & Achim 2001), Italy (Boorman *et al.* 1995) and the Netherlands (Knoz & Beuk 2002). The Canary Islands (region of Spain) are not treated here as a part of Europe since they were treated in the Fauna Europea data-base (Szadziewski & Borkent 2004).

The main purpose of this paper is to revise and summarise old and new faunistic data on the distribution and synonymy of all biting midges of the genus *Dasyhelea* reported from Europe.