



Two new species of predatory biting midges of the genus *Alluaudomyia* from Europe and the Canary Islands (Diptera: Ceratopogonidae)

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Abstract

Alluaudomyia canariensis Szadziewski & Dominiak **sp. nov.** from the Canary Islands and *A. wyskokensis* Szadziewski & Dominiak **sp. nov.** from Poland and Ukraine are described and illustrated. The genus *Alluaudomyia* is reported from the Canary Islands for the first time. The article is supplemented with a checklist and an identification key for the species so far recorded from Europe and the Canary Islands.

Key words: Ceratopogonidae, Ceratopogonini, *Alluaudomyia*, new species, Canary Islands, Poland, Ukraine

Introduction

Biting midges are a relatively well studied large family of the nematoceros Diptera. Several new species of Ceratopogonidae are described annually, and currently 6 224 extant species are known, grouped in 111 genera (Borkent 2015). However, the number of biting midge species in the recent World fauna is estimated at 15 000 (Borkent & Spinelli 2007), which means that we know less than half of them (!) and our knowledge of their biodiversity remains unsatisfactory.

The worldwide distributed genus *Alluaudomyia* Kieffer of the tribe Ceratopogonini contains exclusively predatory biting midges. The immature stages live in aquatic habitats, such as ponds, various types of wetlands, the margins of watercourses and lakes. Some species are associated with treeholes or can be found among wet leaves (Borkent 2014), e.g. those of the aquatic ferns (Díaz *et al.* 2015), or in algal mats, sphagnum, mosses and liverworts (Mullen & Hribar 1988). Larvae often swim on the water surface film (Borkent & Spinelli 2007). The genus is represented by 205 extant species in the World fauna (Borkent 2015). In Europe, as defined by the Fauna Europaea database (including the Canary Islands), 13 species have been identified so far (Szadziewski *et al.* 2013), whereas the relevant fauna from neighbouring regions has been less extensively studied, with one (Remm 1967) and eight species (Szadziewski 1983, Ghonaim *et al.* 2001) reported from the Caucasus and Palaearctic North Africa respectively. The first ever *Alluaudomyia* species, namely *A. splendida*, originally placed in the genus *Ceratopogon* Meigen, was described from Europe by Winnertz in 1852, while the descriptions of further species known to occur in this region were provided by Goetghebuer (1934a), Thomsen (1935), Vaillant (1954), Clastrier (1961, 1978), Remm & Glukhova (1971), Neveu (1978), Remm (1979, 1980), Havelka (1982), Knoz & Ratajský (1987), Delécolle & Rieb (1989) and Boorman (1997). The only comprehensive key for identifying the species known from Europe and the Caucasus published to date is the one by Knoz & Ratajský (1987). This key was based mainly on the male characters and included thirteen specific names of *Alluaudomyia*. Inasmuch as some of these names have been synonymized by various authors since then, two more valid *Alluaudomyia* species were described by Havelka in 1982 (a species omitted in Knoz & Ratajský 1987) and by Delécolle & Rieb (1989), and the descriptions of two new species are presented in this paper, we provide an updated checklist and identification key for the species occurring in Europe and the Canary Islands.