

# Additions to the Norwegian fauna of fungus gnats (Diptera, Mycetophilidae)

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Fiftythree species are reported new to Norway, and their distribution and biology are commented on. Among the new Norwegian species, *Anatella alpina* Plassmann, 1977 and *Trichonta tristis* (Strobl, 1898) are also new to the Nordic region. The total number of species of Mycetophilidae in Norway is thus increased to 575. The majority of the species added forms an extension of the boreal taiga fauna into Norway, including nine more or less mountainous species, while only three species display a southern nemoral to boreonemoral distribution.

Key words: Diptera, Mycetophilidae, Norway, new records.

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## INTRODUCTION

With 942 species, fungus gnats of the family Mycetophilidae (s.s.) is the third most species rich family of nematoceros Diptera in Europe, only outnumbered by Cecidomyiidae and Chironomidae (Fauna Europaea Web Service 2004). Within the Palaearctic region, Mycetophilidae appears to be particularly common and rich in species in the boreal zone (Jakovlev et al. 2006, Kjærandsen et al. 2007a), and research on Nordic fungus gnats has been greatly revitalized the last decade or so, after a period with relative little activity. Ongoing large-scale faunistic and taxonomic projects in Russian Karelia (A. Polevoi, Karelian Forest Research Institute), Finland (J. Jakovlev, Finnish Forest Research Institute / PUTTE program) and Sweden (J. Kjærandsen, the Swedish Taxonomy Initiative) have resulted in the majority of the European species now being known from the Nordic region.

Currently some 800 species have been reported, and the Nordic region has been estimated to hold about 900 species (1000 species including the other families of Mycetophilomorpha, see Kjærandsen & Bengtson 2005). A Nordic zoogeographic (sub)region was defined by Kjærandsen et al. (2007a) to include Iceland, The Faroes, Denmark, Norway, Svalbard, Sweden, Finland, and the northwestern Russian provinces including Karelia (hereafter called NW Russia).

Mycetophilids are probably among the best studied groups of nematoceros Diptera in Norway, even so, compared to the situation in Sweden and Finland, the Norwegian fauna must be characterized as poorly investigated. Norwegian large-scale inventories, like the ones in Karelia, Finland and Sweden, are still wanting, and for most species we still have only a fragmented picture of their total distribution. The first check list covering Norwegian Mycetophilidae (s.s.)