New records of fungus gnats for Norway (Diptera, Mycetophilidae)

GEIR SØLI, EIRIK RINDAL & LARS OVE HANSEN

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Fifteen species of Mycetophilidae are reported new to Norway, and their distribution and biology are commented on. Among the new species, *Neuratelia subulata* Zaitzev, 1994 has previously not been recorded from the Nordic region. The total number of species of Mycetophilidae in Norway is thus increased to 589.

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

Geir Søli, Eirik Rindal and Lars Ove Hansen, Natural History museum, University of Oslo, PO Box 1172 Blindern, NO-0316 Oslo, Norway. E-mail: geir.soli@nhm.uio.no, eirik.rindal@nhm.uio.no, l.o.hansen@nhm.uio.no

Introduction

Fungus gnats in the family Mycetophilidae form an extremely common and species rich group of Diptera in northern temperate regions, and our knowledge about their taxonomy has increased considerably during the last two decades (for a review, see Kjærandsen et al. 2007). Members of the family expose a rather diverse biology, but know, the majority of species are associated with fungi in one or another way. A number of species develop in sporophores, while others feed on mycelium in decaying or rotting organic matter, above all in dead wood. Økland (1994, 1996) demonstrated that species of fungus gnats may be vulnerable to modern forestry practices, and as such good indicators of undisturbed forests. This is one reason why the family was assessed in the last two editions of the Norwegian Red List (Direktoratet for naturforvaltning 1999, Kålås et al. 2006). In the most recent edition, as many as 108 species of Mycetophilidae were included (Gammelmo et al. 2006). An updated and revised edition is prepared in these days, and we thus find it advantageous to publish records of new Norwegian species.

Our knowledge about Norwegian Mycetophilidae is rapidly increasing (see Søli & Kjærandsen 2008). Since the compilation of the first Norwegian check list which comprised 473 species (Gammelmo & Søli 2006), as many as 101 more species have already been added (Kjærandsen & Jordal 2007, Søli & Kjærandsen 2008). By the present contribution, our fauna comprises 589 species. Though, compared to the number of species in our neighbouring countries, one may assert that a high number of species will be discovered in the years to come. In Sweden, which is supposed to have a much similar fauna of Mycetophilidae to that in Norway, the number of species has just exceeded 800! (Kjærandsen, pers. com).

We find it noteworthy that eight of the species here reported as new to Norway, were found in dry, sandy areas. These species were sampled as part of a project designed to study various families of Hymenoptera and Diptera normally found in such habitats. As fungus gnats are most frequent in humid areas, dry areas are seemingly less well investigated by those studying fungus gnats. Hence, there is a possibility that there exists a much ignored assemblage of species living in dry