

**Black Fungus Gnats (Diptera: Sciaridae) in oak canopies:  
description of *Bradysia quercina* MENZEL & KÖHLER spec. nov.  
and new records for Norway**

[Trauermücken (Diptera: Sciaridae) in Eichenkronen:  
Beschreibung von *Bradysia quercina* MENZEL & KÖHLER spec. nov.  
und neue Nachweise für Norwegen]

by

Arne KÖHLER, Frank MENZEL, Karl H. THUNES and Geir E. E. SØLI

(Müncheberg, Germany)

(Müncheberg, Germany)

(Ås, Norway)

(Oslo, Norway)

**Abstract**

In the course of a survey of the fauna of oak canopies in Norway, 44 species of Sciaridae were recorded. One species – *Bradysia quercina* MENZEL & KÖHLER spec. nov. – is described and figured. 21 species were determined to species level, of which 10 are recorded in Norway for the first time.

**Key words**

Sciaridae, Palaearctic Region, Europe, Norway, taxonomy, faunistics, new records, new species, new synonym, canopy, oak

**Zusammenfassung**

Im Zuge einer Untersuchung der Fauna von Eichenbaumkronen in Norwegen konnten 44 Sciaridenarten festgestellt werden. Von diesen wird eine Art – *Bradysia quercina* MENZEL & KÖHLER spec. nov. – neu beschrieben und abgebildet. Weitere 21 Arten konnten bereits bekannten Arten zugeordnet werden, von denen zehn erstmals für Norwegen nachgewiesen wurden.

**Stichwörter**

Sciaridae, paläarktische Region, Europa, Norwegen, Taxonomie, Faunistik, neue Nachweise, neue Art, neues Synonym, Baumkronenfauna, Eichen

**Introduction**

Black Fungus Gnats (Sciaridae) are rich in species and individuals in broadleaf, conifer and mixed woods (MENZEL & MOHRIG 2000). Usually their larvae are phyto-saprophagous and develop in ground litter. Nevertheless, larvae of some species are xylobionts and live in decaying wood or under the bark of trees (TUOMIKOSKI 1957, SHIN et al. 2013). Especially these latter sciarid species could be expected to be found in canopies, although a survey of Norwegian pine canopies detected eight sciarid species that do not belong to this xylobiont guild (*Corynoptera boletiphaga*, *C. trepida*, *Ctenosciara hyalipennis*, *Camptochaeta camptochaeta*, *Bradysia brevispina*, *Cratyna uliginosa*, *Cratyna* spec. and *Epidapus gracilis*) (THUNES et al. 2004). The purpose of this paper is to present data on the Sciaridae collected in a faunistic survey of canopies of Common Oak trees in Norway.

Currently, 77 sciarid species are known from the Norwegian mainland (HELLER & MENZEL 2013) while the Swedish fauna comprises 281 species (HELLER et al. 2009, HELLER & MENZEL 2013) and the Finnish fauna 266 species (HELLER & MENZEL 2013). This comparison with other Fennoscandian countries shows that much work remains to be done on this dipteran family in Norway.