

# The stiletto flies (Diptera, Therevidae) of Norway

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The Norwegian records of Therevidae are reviewed. A total of 18 species in 7 genera are found to belong to the Norwegian fauna; *Acrosathe annulata* (Fabricius, 1805), *Dialineura anilis* (L., 1761), *Dichoglana nigripennis* (Ruthe, 1831), *Pandivirilia eximia* (Meigen, 1820), *Psilocephala imberbis* (Fallén, 1814), *Spiriverpa lunulata* (Zetterstedt, 1838), *Thereva cinifera* Meigen, 1830, *Thereva fuscinervis* Zetterstedt, 1838, *Thereva handlirschi* Kröber, 1912, *Thereva inornata* Verall, 1909, *Thereva lanata* Zetterstedt, 1838, *Thereva marginula* Meigen, 1820, *Thereva microcephala* Loew, 1847, *Thereva nobilitata* (Fabricius, 1775), *Thereva plebeja* (L., 1758), *Thereva strigata* (Fabricius, 1794), *Thereva unica* (Harris, 1780) and *Thereva valida* Loew, 1847. Of these, seven are reported from Norway for the first time, *Thereva cinifera*, *T. handlirschi*, *T. inornata*, *T. marginula*, *T. microcephala*, *T. strigata* and *T. valida*, though five of these are mentioned as Norwegian by Lyneborg in his catalogue of palaeartic species (Lyneborg 1989). A key to the Norwegian species and distribution maps are given.

Key words: Diptera, Therevidae, Norway, identification key, distribution maps.

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## Introduction

[The introduction given here is mostly based on the web-site "Stiletto flies of Australasia, by Winterton et al. (2005)]. The Therevidae comprises one of the remarkably little studied families of the lower Brachycera in Norway. Internationally, the family has been under revision for the last decades, due to the efforts of the late Dr. Leif Lyneborg and Dr. Mike Irwin, who, together with their coworkers, have published a series of works dealing with various parts of the family.

One of the reasons why this family, which on a world basis counts more than 1600 described species, is so poorly known, is the adult flies' seclusive life-style. They live in habitats not often visited by collectors, and they lead a secretive life, and are mostly not encountered in numbers. Yet this family is important for the functioning of arid and semi-arid areas inclusive of the agricultural and forest ecosystems in those areas.

The flies are found in a great variety of habitats, but are most diverse in arid regions, where the sandy soils provide a suitable habitat for their soil-dwelling larvae. The adult flies are nectar feeders, while the larvae are voracious predators of different soil arthropods. Some of the species have their larval stages in decaying wood.

The Therevidae are placed in the superfamily Asiloidea, together with the families Bombyliidae, Asilidae, Apioceridae, Mydidae and Scenopinidae, but the relationship between the families is still unclear.

Using male and female genital characters, Lyneborg (1976) and Irwin & Lyneborg (1981a) divided the Ethiopian and Nearctic therevid faunas into two subfamilies, the Therevinae and Phycinae. The major groups of the Therevidae have distinct distributional patterns. The Phycinae are distributed throughout the Afrotropical, Neotropical and Nearctic regions, while the Therevinae are distributed throughout the