

## Article



## Finnish species of *Nemotelus* (Diptera: Stratiomyidae), with description of a new species

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## **Abstract**

Four species of the soldier fly genus *Nemotelus* are recorded from Finland. One of them, *Nemotelus* (*Nemotelus*) infortunatus **sp. nov.**, is described as new to science from material collected from south-eastern Finland and the adjacent Russian Republic of Karelia. The new species differs from the other North European *Nemotelus* species by the partially black postpronotum, darkened fore and mid tibiae and details of the male genitalia. Details of six *Nemotelus* occurring in North and northern Central Europe are presented for comparison and all six species are shown in colour photographs. A revised key to the North European species of *Nemotelus* is presented.

Key words: Stratiomyidae, Nemotelinae, Nemotelus, new species, Europe, Finland, Russia

## Introduction

Nemotelus is a large genus with 190 currently recognised extant species (Woodley 2001). The Palearctic region holds the largest number of known species (80), followed by the Nearctic (40), Neotropical (45) and the Afropical region with 33 species. No Nemotelus species are known from the Oriental and Australian regions. Only one species – Nemotelus nigrinus Fallén 1817 – has a known Holarctic distribution pattern, but considering the lack of a modern revision of the genus and the relatively uniform appearance of many Nemotelus species, further Holarctic species may await discovery. Thirty species have been found in Europe (Rozkošný 2008).

Typical *Nemotelus* species are rather small soldier flies with a body length of 4–5 mm. The lower face is extended conically down- and forwards. This projection, known as the rostrum, serves as a good character for the genus among the European soldier flies. The deep black ground colour of the body is usually complemented by pale (orange to white) spots on the lower frons, thorax and abdomen. Males of many species have striking black-and-white patterns on abdominal tergites. Females are darker: pale markings on the abdomen are restricted to yellow margins or posteromedial triangles on each tergite.

Adult *Nemotelus* soldier flies can be found near small, sheltered water bodies on open ground. The aquatic or semiaquatic larvae live among vegetation in shallow water or on sheltered, permanently wet soil or moss near pools, streams and in seepages (Burke 1942, Payne 1974, Stubbs & Drake 2001). Many species have a strong preference for habitats with high salinity such as salt marshes and shores of salt lakes. The non-halophiles seem to prefer a neutral to basic water bodies like fens and springs on calcareous soil.

Three species of *Nemotelus* have previously been recorded from Finland (Kahanpää & Winqvist 2005). The latest published review of the genus in northern Europe is Rozkošný's treatise on Stratiomyioidea in the Fauna Entomologica Scandinavica series (Rozkošný 1973). A new review is necessary because of the many misidentifications found during the preparation of the next Finnish Red List of animal species. As suspected, the records of the known halophilous species *N. notatus* Zetterstedt, 1842 and *N. uliginosus* (Linnaeus, 1767) from the land-locked Finnish provinces *Savonia borealis* (*Sb*) and *Karelia borealis* (*Kb*) turned out to be misidentifications. But contrary to all expectations, the corresponding museum specimens could not be placed