

Thanatus arcticus Thorell, 1872 (Araneae, Philodromidae), an addition to Finnish spider fauna

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1. Introduction

Thanatus arcticus Thorell, 1872 is a holarctic spider species. It has been found in the northern part of Sweden in Tornio Lapland (Holm 1968), in Norway in Finnmark (Jackson 1932) and in Russia (van Helsdingen 2007, Tanasevitch & Koponen 2006). The nearctic range of the species covers an area from interior Alaska to Greenland (Dondale et al. 1964).

Two specimens of *Thanatus arcticus* were found misidentified as related species, *Thanatus formicinus* (Clerck, 1758), in the collections of Zoological Museum, Finnish Museum of Natural History, the University of Helsinki. Both specimens were females and collected in Lapland, northern Finland.

2. Material and results

The material comprises:

- 1 female. Muonio, Pallastunturi, Pyhäkero, 12.7.1943, fjeld heath. P. Palmgren leg. (Fig. 1.) and
- 1 female. Enontekiö, Kilpisjärvi, Pikku-Malla, 17.7.1943, regio alpina. P. Palmgren leg.

According to Almquist (2006) *Thanatus arcticus* lives in subalpine heaths. In Russia, west of the Urals in Siberia, the habitat of the species is an under-shrub tundra and sparse spruce-birch forest tundra (Tanasevitch & Koponen 2006). In Sweden, Holm (1968) found the species in *Empetrum hermaphroditum* and *Vaccinium myrtillus* – *Betula*

nana heaths at the heights of 450–1,000 m above sea level. Probably, the female from Pallastunturi is the *Thanatus formicinus* -specimen of which Palmgren (1964) mentioned “sogar nahe an der höchsten Kuppe”, and that could mean a height of nearly 800 m above sea level.

Thanatus arcticus can be separated from *Thanatus formicinus* by the differences in the structure of genitals. *T. arcticus* -male has a curved embolus in the pedipalp, while the embolus of *T. formicinus* is more or less straight (see Almquist, 2006). There are differences also in female epigynes. The epigynal midseptum of *T. arcticus* tapers posteriorly (Fig. 1.), while that of *T. formicinus* is about evenly broad (Fig 2. See also Almquist, 2006).

3. Discussion

Mixing two species, *Thanatus arcticus* and *Thanatus formicinus*, is understandable, because the habitus and the coloration of spiders are quite similar. Moreover, especially when preserved in alcohol the coloration of the spiders tends to faint in time.

T. formicinus is a common spider in the whole Finland and its distribution overlaps with that of *T. arcticus*. In the north *T. formicinus* occurs in the same kind of habitats as *T. arcticus* but the spectrum of habitats in the former species is wider there including both dry and moist half open environments (Palmgren 1950). While *T. arcticus* seems not to occur much below tree line there is no danger of confusing the species in southern part of Finland. There are no recent records of *T. arcticus*



Fig. 1. *Thanatus arcticus* Thorell, 1872, a female. Pyhäkero, 12.7.1943. Epigyne in the insert picture.

in Scandinavia, which can be a consequence of the rareness of the species or the lack of sampling or both. Thus the biology of *T. arcticus* is also not known well.

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Lisäys Suomen hämähäkkilajistoon

Kaksi *Thanatus arcticus* Thorell, 1872 (Araneae, Philodromidae) -yksilöä löytyi Luonnontieteellisen keskusmuseon Eläinmuseon hämähäkkikoelmista määritettynä läheiseksi lajiksi, *Thanatus formicinus* (Clerck, 1758). Molemmat yksilöt olivat naaraita ja ne oli kerätty Pohjois-Suomesta, Lapin tunturialueelta Pallastunturilta ja Pikku-Mallalta. Laji on levinneisydeltään holarktinen ja elää avoimilla ja pensaikkoisilla tunturinumilla sekä puuttomalla tai harvapuustoisella tundralla.

T. arcticus saattaa olla vaikea erottaa Suomesa yleisenä esiintyvistä, olemukseltaan samankaltaisesta *T. formicinus* -lajista, joka pohjoisessa elää myös samanlaisessa ympäristössä. Määrittystä auttavat tuntomerkit löytyvät kuitenkin koiraan pedipalpeista ja naaraan epigynistä, jossa vaalea keskialue *T. arcticus* -lajilla kapenee takaosastaan ku-



Fig. 2. *Thanatus formicinus* (Clerck, 1758), a female. Epigyne in the insert picture.

van 1 mukaisesti mutta joka *T. formicinus* -lajilla on tasaleveä (kuva 2). Lajia ei ole tavattu Skandinavian alueella eikä Venäjälläkään kovin monta yksilöä, joten sen biologiasta ei paljon tiedetä.

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