

# Five mesostigmatid mites (Acari, Mesostigmata) new to the Norwegian fauna

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This paper presents five mesostigmatid mites (*Cheiroseius bryophilus* Karg 1969, *Cheiroseius mutilus* (Berlese 1916), *Lasioseius mirabilis* Christian et Karg 1992, *Neojordensia sinuata* Athias-Henriot 1973, *Macrocheles carinatus* (C.L. Koch 1839)) new to the Norwegian fauna. Distributions and habitats outside of Norway are discussed.

Key words: Mites, Acari, Mesostigmata, Gamasina, *Cheiroseius bryophilus*, *Cheiroseius mutilus*, *Lasioseius mirabilis*, *Neojordensia sinuata*, *Macrocheles carinatus*, eutrophic wetland, Norway.

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## Introduction

According to the checklist of Norwegian mesostigmatid mites (Gwiazdowicz & Gulvik 2005b) and two additional reports (Gwiazdowicz & Gulvik 2005a, 2007), a total of 225 mesostigmatid mites species have been reported from Norway. In this paper we describe five new species collected from eutrophic wetlands in western Norway.

## Descriptions of the localities

*Midtveitvatnet* lies in Sund municipality at 60°15'43"N and 04°58'48"E at 20m.a.s.l. The sampling location consists of a eutrophic lake surrounded by reed bed (*Phragmites australis* (Cav.) Trin. ex Steud.) and is approximately 20 hectares in area. The samples were collected on 27 April 2009.

*Seimsvatnet* is a lake in Lindås municipality

at 60°36'35"N and 05°17'06"E at 39m.a.s.l. The lake is surrounded by canary grass *Phalaris canariensis* L. and with an area of 100 hectares. The samples were collected on the 1 July 2009.

*Liavatnet* is a lake in Lindås municipality at 60°36'51"N and 05°22'42"E at 14m.a.s.l. A well-developed 12 hectare reed bed, *Phragmites australis*, lies at the northern end of the lake. The samples were collected on the 1 July 2009.

*Vadet* is a small swamp (9 hectares) in Fjell municipality consisting mainly of reeds. The swamp lies at 60°25'06"N and 04°58'10"E at about 20m.a.s.l. The samples were collected on the 11 July 2009.

*Måsavatnet* is a lake on Turøy in Fjell municipality at 60°26'44"N and 04°55'14"E at approximately 13m.a.s.l. The sampling location has an extent of approximately 24 hectares with swamp scrub and horsetail vegetation along the edges. The samples were collected on the 11 July 2009.

*Klessvatnet* is a lake in Radøy municipality lying at 60°42'18"N and 04°59'52"E and at 4m.a.s.l. It is a long and narrow lake with reed bed vegetation along the edges, which together cover an area of about 26 hectares. The samples were collected on the 11 August 2009.

## Material and methods

The material was collected with a litter sieve (mesh size 11mm) by sifting debris, dead vegetation parts and mosses close to water bodies and in the reed belts. The material passing through the mesh was placed in Berlese-Tullgren funnels one to three days after collection and extracted into 75% ethanol to which a few drops of liquid soap had been added. The extraction lasted for 3–6 days. The extracted specimens were kept in 75% ethanol before making microslides.

The identified material is deposited in University Museum of Bergen, University of Bergen Norway.

## List of species

### *Cheiroseius bryophilus* Karg, 1969

**Material.** From Midttveitvatnet 24 females were recorded.

**Distribution.** Known distribution is Central Europe, and it has been reported from very moist litter and moss (Karg 1993, Gwiazdowicz 2007).

### *Cheiroseius mutilus* (Berlese, 1916)

**Material.** From Midttveitvatnet two females were recorded, from Liavatnet one female, from Vadet two females and from Måsavatnet three females.

**Distribution.** Reported from Europe and North America (Kaluz & Fenda 2005). It has previously been found in agricultural and woodland sites, occurring in litter, grass sods, silt, moss and peat moss (Karg 1993, Gwiazdowicz 2007). In addition, Kaluz & Fenda (2005) report this species from nests of six different bird species.

### *Lasioseius mirabilis* Christian & Karg, 1992

**Material.** Two females were recorded from Midttveitvatnet.

**Distribution.** Known distribution is Central Europe where it is reported, nonspecific, from the upper soil layer (Karg 1993).

### *Neojordensia sinuata* Athias-Henriot, 1973

**Material.** One female was recorded from Midttveitvatnet and four females from Måsavatnet.

**Distribution.** Its known distribution is European and it has been found among the roots of grasses on sandy shores, in litter, moss, dead vegetation and in the nest of a gull (Karg 1993, Gwiazdowicz 2007).

### *Macrocheles carinatus* Karg, 1969

**Material.** From Klessvatnet one female was recorded and from Seimsvatnet one male.

**Distribution.** The known distribution is Europe. It has been reported from litter and upper soil layers of a variety of habitats (Bregetova 1977, Mašan 2003).

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