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Description of a new species of *Ameroseius* Berlese (Acari: Ameroseiidae) from Norway, with a key to related species

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Abstract

Ameroseius is the largest genus of the mite family Ameroseiidae (Mesostigmata), with a worldwide distribution. *Ameroseius norvegicus* Narita, Abduch & Moraes **n. sp.** is described based on the morphology of adult females collected from litter in a strawberry field, in Norway. The new species is most similar to *Ameroseius ulmi* Hirschmann. A key is provided to separate them as well as other similar species constituting what is here referred to as the *sculptilis* group.

Key words: Mesostigmata, taxonomy, litter, strawberry

Introduction

Ameroseius Berlese is the largest genus of the mite family Ameroseiidae, comprising about 100 described species. Species of this genus are known from different regions around the world, except Antarctica, inhabiting soil, plant litter, organic matter, stored food, associated with fungi, insects, birds and mammals, and less often with plants (Hughes, 1961; Westerboer & Bernhard, 1963; Allred, 1970; Elsen, 1973; Mašán, 1998; Vargas & Polaco, 2001). Biological studies suggest species of this genus are fungivorous (Flechtmann, 1985; Moustafa & El-Hady, 2006), and the species *Ameroseius kosi* (El-Badry, Nasr & Hafez, 1979) has been mentioned as potentially useful for the biological control of the fungi *Rhizoctonia solani* Kühn and *Sclerotium bataticola* Taubenh (Moustafa & El-Hady, 2006).

Two *Ameroseius* species have previously been reported from Norway, both from Sogn og Fjordane county: *Ameroseius furcatus* Karg, 1971, from tree holes, and *Ameroseius longitrichus* Hirschmann, in Westerboer & Bernhard (1963), from a rotten beam attacked by beetles (Slomian *et al*., 2005; Gwiazdowicz & Gulvik, 2007). A study of the mite fauna in a Norwegian strawberry field included the examination of leaf litter collected in 2009–2011 (partially reported by Castilho *et al*., 2015). Specimens of an undescribed *Ameroseius* species were found among the mites collected. The objective of this paper is to describe this species and provide a key to separate it from the closest species.

Material and methods

Litter samples were collected in an established conventional strawberry field at Sylling, in southeastern Norway. The litter consisted of mulch (wheat straw) and dead strawberry plant parts. Sampling was conducted by taking 10 handfuls of litter from the three central double rows of each experimental subplot. Litter samples were collected at the following dates in 2009: October 7 and 19; in 2010: April 19 and 26; May 3, 10 and 18, and in 2011: April 14 and 27. As often observed for *Ameroseius* mites, the idiosoma of the specimens collected was partially covered

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