



A new species of *Gamasiphis* Berlese (Acari: Ologamasidae) from North Asia, with a key to the Eurasian species

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Abstract

Gamasiphis angaridis sp. n. is described from females and males collected from litter and soil in the North Asian part of Russia–Siberia and the Far East. This is the first species of the large genus *Gamasiphis* to be described from the northern Palaearctic Region. A key for the separation of females of the 11 recognisable species of *Gamasiphis* described in Eurasia is provided.

Key words: Mesostigmata, edaphic mites, taxonomy

Introduction

The family Ologamasidae Ryke is a large group of predatory mites encountered in soil, humus and compost (Lindquist *et al.*, 2009). The family is much richer in genera and species in tropical to subantarctic regions of the Southern Hemisphere than in Northern Hemisphere (Lindquist *et al.*, 2009). *Gamasiphis* is one of the most diverse genera of Ologamasidae, with 72 described species (Castilho *et al.*, 2010a, 2012). Studies by Beaulieu & Walter (2007) and Castilho *et al.* (2010b) indicate that *Gamasiphis* species may feed on Nematoda, Collembola and other soft-bodied arthropods.

Ten species of *Gamasiphis* have been described or recorded from Eurasia. Four species are known from Europe—*G. pulchellus* (Berlese, 1887) was recorded from North Italy, Belgium, Bulgaria and Spain (Berlese, 1904; Van Daele, 1975; Deltsev *et al.*, 1998; Moraza & Peña, 2005); *G. gandensius* Van Daele, 1975 from Belgium, *G. sextus* Vitzthum, 1921 and *G. lanceolatus* Karg, 1987 from Germany.

Seven species are known from Asia: *G. pulchellus* from Caucasus, China, Japan (Lee, 1970; Bregetova, 1977; Ma & Ma, 2000, Caucasus specimens in O. Makarova's collections); *G. productellus* Berlese, 1923, *G. novipulchellus* Ma & Yin, 1998, *G. aduncus* Ma, 2004 and *G. turgicalcareus* Ma, 2009 from China (Berlese, 1923; Ma & Yin, 1998; Ma, 2004; 2009), *G. bengalensis* Bhattacharyya, 1966 and *G. indicus* Bhattacharyya, 1978 from India (Bhattacharyya, 1966, 1978). Apart from its occurrence in Europe and Asia, *G. pulchellus* has also been recorded from Egypt and South Africa (Lee, 1970; Zaher, 1986; Halliday, 2005; El-Banhawya *et al.*, 2006), USA, Mexico and Bermuda (Ewing, 1920; Hennessey & Farrier, 1988; Minor & Norton, 2004), and Java (Castagnoli & Pegazzano, 1985). The objective of this paper is to provide description of a new species of *Gamasiphis* from the North Asian part of Russia and a key to Eurasian species of this genus.

Material and methods

Samples of soil and litter were collected for many years (1972–2011) by numerous collectors in different regions of the North Asian part of Russia – Altai Mountains, Kemerovo Region, north of Krasnoyarskii Krai, Amur Region, Khabarovskii Krai, Primorskii Krai, Sakhalin and Kuril Islands (Kunashir and Shikotan). Mites were extracted using a Berlese funnel and mounted in Hoyer's medium. The specimens of *Gamasiphis* were separated and examined under a microscope Zeiss Axioscop 40, and were found to belong to a new species.