



Article

urn:lsid:zoobank.org:pub:427A6BB2-B4EE-4053-8916-E64D608279DA

Description of a new species of *Typhlodromus* Scheuten (Acari: Phytoseiidae) from house dust from Rio Grande do Sul, Brazil

NOELI JUAREZ FERLA, GUILHERME LIBERATO DA SILVA & JOSEANE MOREIRA DO NASCIMENTO

Laboratório de Acarologia, Museu de Ciências Naturais, UNIVATES - Centro Universitário, 95900-000 Lajeado, RS, Brazil.

E-mail: njferla@univates.br, gibaliberato_148@hotmail.com, joseanemn@gmail.com

Abstract

Typhlodromus (*Anthoseius*) *sabelisi* n. sp., a member of the *rhenanus* species group, is described from the State of Rio Grande do Sul, in southern Brazil, based on specimens collected from house dust removed from a curtain using a vacuum cleaner. So far, only *Typhlodromus* (*Anthoseius*) *ornatus* (Denmark & Muma, 1973) and *T. (A.) transvaalensis* (Nesbitt, 1951) have been reported from the State of Rio Grande do Sul. A key to the species of *Typhlodromus* (*Anthoseius*) De Leon reported in Brazil is provided.

Key words: dust mite; predatory mite; taxonomy; Typhlodrominae

Introduction

Phytoseiidae is one of the most extensively studied mite families in the world. Phytoseiids are predators of spider mites and other small mites and insects on plants. Some species also feed on nematodes, fungal spores, pollen and exudates from plants (McMurtry & Croft, 1997), but rarely plant tissue (Magalhães & Bakker, 2002; Sengonca *et al.*, 2004). Several species are of great importance in applied biological control of spider mites and thrips in greenhouse crop production (Zhang, 2003) and orchards (Moraes *et al.*, 2004).

Little information is available about this group from the state of Rio Grande do Sul, in southern Brazil. Until now, only *Typhlodromus* (*Anthoseius*) *ornatus* (Denmark & Muma, 1973) and *Typhlodromus* (*Anthoseius*) *transvaalensis* (Nesbitt, 1951) have been reported in from that state (Ferla & Moraes, 2002; Ferla *et al.*, 2007, 2011). Given the importance of this state in agricultural production in Brazil, an effort has recently been dedicated to determining the phytoseiid species on the main crops and on wild plants growing around agricultural areas of the state. Four species have been recently described from that state (Ferla & Silva, 2008, 2009, 2011; Ferla *et al.*, 2010). The aim of this paper is to present the description of a new phytoseiid species of the *Typhlodromus* (*Anthoseius*) *rhenanus* species group of Chant & McMurtry (1994) and to provide a key for the separation of the species of *Typhlodromus* (*Anthoseius*) reported from Brazil.

Material and methods

Dust samples were taken from curtains of a home surrounded by natural vegetation at Encantado, State of Rio Grande do Sul, using a commercial vacuum cleaner. The dust was examined under a stereomicroscope and mites were collected and mounted in Hoyer's medium for identification under a phase contrast microscope. Illustrations of the specimens collected were done with a Camera Lucida and the software Corel Draw X5.

Setal nomenclature is that of Lindquist & Evans (1965) as applied to the Phytoseiidae by Rowell *et al.* (1978) and Chant & Yoshida-Shaul (1992), for the dorsal and ventral surfaces of the idiosoma, respectively. Average measurements and the corresponding ranges are given in micrometres.