

First record of *Typhlodromus (Anthoseius) transvaalensis* (Acari: Phytoseiidae) from Argentina

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Primer registro de *Typhlodromus (Anthoseius) transvaalensis* (Acari: Phytoseiidae) de la Argentina

RESUMEN. Se cita por primera vez de la Argentina a *Typhlodromus (Anthoseius) transvaalensis* Nesbitt (Acari: Phytoseiidae) sobre *Capsicum annuum* L. y *Lycopersicon esculentum* L. (Solanaceae) en la localidad de Concordia, Entre Ríos. Se proporcionan datos morfológicos de los ejemplares argentinos.

PALABRAS CLAVE. Ácaros fitoseidos. *Typhlodromus*. Cultivos hortícolas. Solanaceae.

ABSTRACT. We report for the first time from Argentina *Typhlodromus (Anthoseius) transvaalensis* Nesbitt from *Capsicum annuum* L. and *Lycopersicon esculentum* L. (Solanaceae) in Concordia, Entre Ríos. Morphometric parameters of Argentine specimens are provided.

KEY WORDS. Phytoseiid mites. *Typhlodromus*. Horticultural crops. Solanaceae.

The family Phytoseiidae Berlese (Acari: Mesostigmata) includes the most frequent predatory mites found on plants. Most of them are predaceous; some species are effective bio-control agents in greenhouses or open field. They are used to control spider mites, thrips, whiteflies and other pests in several parts of the world (Helle & Sabelis, 1985; Zhang, 2003; Gerson & Weintraub, 2007).

The family Phytoseiidae has three sub-families: Amblyseiinae, Phytoseiinae and Typhlodromiinae. In the latter, the subgenus *Typhlodromus (Anthoseius)* De Leon, comprising 322 species, is one of the largest within the family (Moraes, *et al.*, 2004; Rahmani *et al.*, 2010; Jafari *et al.*, 2011). Guanilo *et al.* (2008) give important taxonomic information of phytoseiid mites in northern Argentina, providing a key for their identification and reporting the species that belong to Amblyseiinae and Phytoseiinae. In this work, *Typhlodromus (Anthoseius) transvaalensis* is cited for the first time from Ar-

gentina. We also present morphometric parameters in order to characterize Argentine specimens.

Mites were collected on *Capsicum annuum* L. and *Lycopersicon esculentum* Mill. (Solanaceae), preserved in alcohol 70% and then mounted in Hoyer's medium for identification. The classification system used in this paper is that of Chant & McMurtry (1994, 2007). The system of nomenclature follows Rowell *et al.* (1978) for dorsal idiosomal setae and Chant & Yoshida-Shaul (1991) for ventral idiosomal setae. All measurements are given in micrometres (µm). Setal form is designated *sensu* Muma & Denmark (1970). Each measurement corresponds to the average for the number of individuals, followed (in parentheses) by the respective ranges.

Typhlodromus (Anthoseius) transvaalensis (Nesbitt 1951)

Female. (3 specimens measured)

Dorsum (Fig. 1). Dorsal shield reticulate; 376

in many habitats including stored products, this fact could explain its wide distribution. Measurements of dorsal shield of Argentine specimens are 5% longer and 30% wider than those provided by Schicha (1981), while ventri-anal shield is 6% narrower and 21% longer. With this record 48 species of phytoseiid mites are reported from Argentina.

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