



Phytoseiid mites (Acari: Phytoseiidae) from Argentina, with description of a new species

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Table of contents

Abstract	2
Introduction	2
Methods and materials	2
AMBLYSEIINAE Muma	3
Amblyseiini Muma	3
Subtribe Amblyseiina Muma	3
<i>Amblyseius</i> Berlese	3
<i>Chelaseius</i> Muma & Denmark	6
<i>Graminaseius</i> Chant & McMurtry	7
Subtribe Arrenoseiina Chant & McMurtry	7
<i>Arrenoseius</i> Wainstein	7
Subtribe Proprioseiopsina Chant & McMurtry	8
<i>Proprioseiopsis</i> Muma	8
Euseiini Chant & McMurtry	11
Subtribe Euseiina Chant & McMurtry	11
<i>Euseius</i> Wainstein	11
Subtribe Typhlodromalina Chant & McMurtry	14
<i>Typhlodromalus</i> Muma	14
Kampimodromini Kolodochka	16
Subtribe Paraphytoseiina Chant & McMurtry	16
<i>Paraphytoseius</i> Swirski & Schechter	16
Neoseiulini Chant & McMurtry	16
<i>Evansoseius</i> Sheals	16
<i>Neoseiulus</i> Hughes	17
Phytoseiulini Chant & McMurtry	22
<i>Phytoseiulus</i> Evans	22
PHYTOSEIINAE Berlese	23
<i>Phytoseius</i> Ribaga	23
TYPHLODROMINAE Wainstein	24
Galendromimini Chant & McMurtry	24
<i>Silvaseius</i> Chant & McMurtry	24
Metaseiulini Chant & McMurtry	24
<i>Galendromus</i> Muma	25

<i>Metaseiulus</i> Muma	25
Paraseiulini Wainstein	26
<i>Paraseiulus</i> Muma	26
Key to the Phytoseiidae reported from Argentina	26
General remarks	29
Acknowledgements	30
References	30

Abstract

This paper reports the mites of the family Phytoseiidae known from Argentina. It is based mostly on a survey conducted in the northern region of that country as well as on published information. Twenty-two species were found in that survey, ten of which are new records from that country, including a new species here described as *Neoseiulus argentinus* Guanilo & Moraes **n. sp.**. Measurements of all species collected and a taxonomic key to separate the species known to date from Argentina are provided. All together 47 species are reported from Argentina.

Key words: Taxonomy, predatory mites, biological control

Introduction

Mites of the family Phytoseiidae from Argentina have been studied by a number of authors (Berlese 1914; 1916a, b; Cunliffe & Baker 1953; Chant 1959; Gonzalez & Schuster 1962; Sheals 1962; Athias-Henriot 1967; Karg 1979; Alzuet 1970; McMurtry 1977; Herrero 1984; Fernandez *et al.* 1988; Herrero *et al.* 1990; Monetti & Fernandez 1995; Lemme *et al.* 1996; Müther 1998; Cedola 1999; Ruiz *et al.* 2005; Furtado *et al.* 2007). To supplement this published information, a survey was recently conducted in Tucumán Province (Furtado *et al.* 2007), in northern Argentina, in searching for prospective natural enemies of the tomato red spider mite, *Tetranychus evansi* Baker & Pritchard (Tetranychidae). The latter has become a major pest of tomatoes in Africa, and has also been reported recently on different plant species in Europe and Asia (Migeon & Dorkeld 2007). Given the interesting findings of Furtado *et al.* (2007), a more extensive survey was considered necessary in northern Argentina, in places climatically similar to areas in Africa where that pest has been found (Fiaboe *et al.* 2006).

The objective of this paper is to present taxonomic information on the predatory mite species in northern Argentina in a search for natural enemies of *T. evansi*, and to provide a key for the identification of phytoseiids known from that country.

Methods and materials

The survey was conducted in May 2007, in the following Provinces: Chaco, Corrientes, Entre Ríos, Salta, Santiago del Estero and Tucumán. Because of the preference of *T. evansi* for Solanaceae (Moraes *et al.* 1987), most effort in the survey was devoted to plants of that family, although nearby plants of other families were also examined. Sampled plants were checked under a stereomicroscope and mites found were mounted in Hoyer's medium for identification.

The classification system used in this paper is that of Chant & McMurtry (1994; 2003a, b; 2004a, b; 2005a, b; 2006; 2007). The system of nomenclature was that of Rowell *et al.* (1978) for dorsal idiosomal setae and Chant & Yoshida-Shaul (1991) for ventral idiosomal setae. All measurements are given in micrometres (µm); each measurement corresponds to the average for the number of individuals indicated for each sex of