



Phytoseiid mites (Acari: Phytoseiidae) of the subfamilies Phytoseiinae Berlese and Typhlodrominae Wainstein from Peru, with descriptions of two new species

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Abstract

This paper reports the mites of the subfamilies Phytoseiinae and Typhlodrominae (Phytoseiidae) from Peru, providing descriptions of 2 new species, *Phytoseius ortegae* Guanilo and Moraes, **n. sp.** and *Phytoseius poripherus* Guanilo and Moraes, **n. sp.**, and a taxonomic key to separate the species reported.

Key words: Taxonomy, predatory mites, biological control

Introduction

Surveys to determine prospective natural enemies for the control of the tomato red spider mite, *Tetranychus evansi* Baker and Pritchard (Tetranychidae), have been conducted in Brazil (Fiaboe *et al.* 2007; Furtado 2006; Furtado *et al.* 2006; Rosa *et al.* 2005) and Argentina (Furtado *et al.* 2007), in areas climatically similar to places in Africa where that mite occurs (Fiaboe *et al.* 2006). Most of the natural enemies found in those studies were mites of the family Phytoseiidae. The main objective of the present paper is to report the results of a taxonomic study of part of the species collected in a survey conducted in regions of Peru determined by Fiaboe *et al.* (2006) to be climatically similar to places where *T. evansi* occurs in Africa. Because of the preference of *T. evansi* for plants of the family Solanaceae (Moraes *et al.* 1987), most effort was dedicated to examine solanaceous plants, although nearby plants of other families were also examined. Samples were taken mostly from disturbed areas along roadsides, on the outskirts of villages and in cultivated fields, to ensure the examination of the largest possible number of solanaceous species. Sampled plants were checked under stereomicroscope; mites found were mounted in Hoyer's medium for identification. Studies dealing with biological aspects of species collected in this study are subjects of future papers.

This paper refers mainly to the phytoseiids of the subfamilies Phytoseiinae and Typhlodrominae found in the samples collected in this study. In addition, it refers to mites of those groups previously collected in Peru by different authors. A taxonomic key was prepared for the separation of those species. Phytoseiids of the subfamily Amblyseiinae will be treated in a future paper. The classification system used in this paper is that of Chant and McMurtry (1994). Adopted nomenclature was that of Rowell *et al.* (1978) for dorsal and Chant and Yoshida-Shaul (1991) for ventral idiosomal setae. All measurements are given in micrometers (μm); each measurement corresponds to the average for the number of individuals indicated for each sex of each species, followed by the respective ranges (in parentheses), when variable among the specimens at hand. Measurements are provided not only for the new species, but also for species already described, based on specimens collected in this study.