



Phytoseiidae Database: a website for taxonomic and distributional information on phytoseiid mites (Acari)

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Abstract

This paper announces a database on the taxonomy and distribution of mites of the family Phytoseiidae Berlese, which is available online at <http://www.lea.esalq.usp.br/phytoseiidae/>. Synthesis of species diversity per genus, subfamily and country are given. Information about use of the database is provided.

Key words: biological control, mite, predatory, taxonomy

Introduction

Phytoseiid mites (Acari: Phytoseiidae) have received great attention from the scientific community due to their potential as biological control agents of phytophagous mites, thrips and whiteflies (Gerson *et al.*, 2003; McMurtry *et al.*, 2013). Several species of this family are presently available commercially for use in agriculture, and can easily be found by a search on the internet.

Present and future biological studies may lead to the discovery of other promising species for pest control, which may be more effective than the species already in use (Gerson *et al.*, 2013; McMurtry *et al.*, 2013). These studies require the precise classification and correct identification of these organisms.

Phytoseiidae is a large family. The first version of the world phytoseiid catalog was published by Moraes *et al.* (1986) and included about 1,500 species in 79 genera. The second version (Moraes *et al.*, 2004) included about 2,200 species in 67 genera; the number of genera in the second version was fewer due to the synonymising of some of the genera. Later, Chant & McMurtry (2007) listed about 2,300 species in 84 genera, while Prasad (2012) mentioned 2,692 species names (including synonyms).

In September 2012, the first version of an electronic database was released for open access on the internet, <http://www.lea.esalq.usp.br/phytoseiidae/> (Demite *et al.*, 2014). The aim of this paper is to report the availability of a new version of that database, describe the methodology used in its preparation, and explain how to use the variety of information it provides.

The Phytoseiidae Database is not a taxonomic revision. It contains no formal taxonomic decisions. Placement of a species under a genus different from which it has been known in the literature should not be considered a "new combination". Thus, no new names are proposed for homonyms that could have resulted from the different placement of species in genera according to the system used in this database, or to homonyms that have already been created in the literature and for which new names have still not been proposed.

Materials and methods

Type locality is indicated according to collection data for the holotype or type series in the original description.

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