



## Phytoseiid mites of the subfamily Phytoseiinae (Acari: Phytoseiidae) from sub-Saharan Africa

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### Abstract

This is the seventh publication in a series concerning the phytoseiid mites of sub-Saharan Africa. Sixteen phytoseiid species of the subfamily Phytoseiinae (*Chantia*: 1 species, *Phytoseius*: 13 species and *Platyseiella*: 2 species) are reported in this paper. They include all species of this subfamily known to occur in sub-Saharan Africa. Ten of these species are redescribed. Most of those species were collected in cassava habitats in tropical Africa and in other habitats in South Africa. A key is included to help in the separation of these species.

**Key words:** Biological control, predator, cassava, taxonomy, Phytoseiidae

### Introduction

Phytoseiid mites are commonly used for the biological control of pest mites in many countries. An inventory of the fauna of a given region is one of the first steps in an effort to establish a biological control program against a pest species.

In 1984, the International Institute of Tropical Agriculture (IITA) initiated a campaign to control the tetranychid mite *Mononychellus tanajoa* (Bondar) biologically (Yaninek & Herren 1988; Yaninek & Hanna 2003). This mite is a pest of cassava (*Manihot esculenta* Crantz) that was accidentally introduced from the Neotropics to Africa (Nyiira 1972). Surveys were conducted by IITA personnel in cassava habitats of several cassava-growing countries in sub-Saharan Africa to determine the composition of the mite fauna before and after the introduction of exotic phytoseiids from the Neotropics to control that pest. During those surveys, many phytoseiid species were collected. This paper is the seventh in a series covering the phytoseiid species of sub-Saharan Africa. This series refers to all mites of this group previously reported by different authors from that region as well as to those found more recently in South Africa by researchers of that country and in other sub-Saharan countries by IITA personnel in the course of the project on the biological control of *M. tanajoa*. The first six papers dealt with species of the subfamily Amblyseiinae (Moraes *et al.* 2001, 2006, 2007; Zannou *et al.* 2006, 2007). The objective of the present paper is to report on the phytoseiid mites of the subfamily Phytoseiinae Berlese from sub-Saharan Africa, with redescriptions of some of these species based on the most recently collected specimens. A key is presented for the separation of the species mentioned in this paper.