

## New Records of Phytoseiid Mites (Acarina: Phytoseiidae) from Cyprus<sup>1, 2</sup>

S. AMITAI

*Department of Entomology, Agricultural Research Organization, The Volcani Center,  
P.O. Box 6, Bet Dagan 50250, Israel*

### ABSTRACT

Seven species of Phytoseiid mites are recorded for the first time from various plants in Cyprus: *Amblyseius barkeri* (Hughes), *Euseius scutalis* (Athias-Henriot), *Euseius finlandicus* (Oudemans), *Typhlodromus leptodactylus* Wainstein, *Typhlodromus exhilaratus* Ragusa, *Typhlodromus phialatus* Athias-Henriot, *Typhlodromus carmonae* Chant and Tshida-Shaul.

### Introduction

Phytoseiid mites are important predators of mite and insect pests, in various ecosystems. Many phytoseiids were colonized in new habitats and few replace the conventional use of synthetic insecticides, mainly in greenhouses. Hence information on the discovery of new geographical strains may be of importance for IPM and classic biological control projects, particularly against mite pests.

Only three phytoseiid species have been recorded (Georgiou 1977) from Cyprus prior to the present survey. These species were collected from different parts of the island; namely, *Amblyseius asiaticus* (Evans), *Typhlodromus tiliae* Oudemans and *Amblydromella rhenana* (Oudemans).

### Methods

This paper presents data on seven species of phytoseiid mites which were collected during a survey in May 1991. The mites were dropped on a black surface by shaking of the foliage, and collected with an aspirator device. The specimens were stored in 96% ethyl-alcohol, cleared with Nesbitt and mounted in Hoyers solution.

### Results and Discussion

*Amblyseius barkeri* Hughes, 1948.

MATERIAL EXAMINED: Astromeridis, 1.V.91, 4 ♀♀, 1 ♂, on grass (Gramineae).

*Euseius scutalis* (Athias-Henriot), 1958.

MATERIAL EXAMINED: Nicosia, 14 ♀♀, 4 ♂♂ on *Pittosporum* spp. 3 ♀♀ on citrus.

*Euseius finlandicus* (Oudemans), 1915.

MATERIAL EXAMINED: Troodos Mt., 4 ♀♀ on *Juglans regia*; Paphos forest 2 ♀♀, on *Platanus* sp.

*Typhlodromus leptodactylus* (Wainstein), 1961.

MATERIAL EXAMINED: Nicosia (Atalasa Station), 3 ♀♀, on *Cupressus sempervirens*.

*Typhlodromus exhilaratus* (Ragusa), 1977.

MATERIAL EXAMINED: Elioudhix-Tisiki, Adelphi forest, Troodos Mt. 4 ♀♀, 1 ♂, on *Myrtus communis*. This species was recorded in Italy on *Rosmarinus officinalis* on *Laurus nobilis*; and on *Pinus halepensis*, in Israel.

*Typhlodromus phialatus* Athias-Henriot, 1960.

MATERIAL EXAMINED: Elioudhix-Tisiki, Adelphi forest, 1 ♀, on *Pinus pinea*.

*Typhlodromus carmonae* Chant and Yoshida-Shaul, 1983.

MATERIAL EXAMINED: Atalasa Station 2 ♀♀ on *Cupressus sempervirens*.

During this survey I did not find any of the three species recorded by Georgiou (1977). It is interesting to note that none of the species recorded here from Cyprus are endemic. *T. car-*

<sup>1</sup> Received for publication April 15, 1992.

<sup>2</sup> Contribution from the Agricultural Research Organization, The Volcani Center, Bet Dagan, Israel No. 5492-E series.

*monae* was found prior to the present survey in Portugal (Chant & Yoshida, 1983) and Greece (Papadoulis and Emmanuel 1993), whereas others are widely distributed in various regions. The fact that all the seven species collected are new to the island may indicate that a thorough survey of this mite family will reveal other species of this important group of predators.

### Acknowledgment

Sincere thanks are expressed to Prof. E. Swirski, to Dr. Z. Mendel and to Dr. Y. Ben-Dov for their assistance concerning terminology and editing, and to Mr. Andreas Neophytou from the Forest Department, Nicosia for his valuable assistance.

### References

- Athias-Henriot, C. 1958. Phytoseiidae et Aceosejidae (Acarina, Gamasina) d'Algérie. II. Phytoseiidae cle des genres, genres *Amblyseius* Berlese (Suite) et *Seiulus* Berlese Bull. Soc. Hist. N&T Afrique Nord, 49: 23-43.
- Athias-Henriot, C. 1960. Phytoseiidae et Aceosejidae Acarina: Gamasina) d'Algérie. IV. Genre *Typhlodromus* Scheuten, 1857. Ibid. 51: 62-107.
- Chant, D.A. and E. Yoshida-Shaul. 1983. A world review of the simplex species group in the genus *Typhlodromus* Scheuten (Acarina: Phytoseiidae). Can. J. Zool. 61: 1142-1151.
- Georghiou, G.P. 1977. The Insects and Mites of Cyprus. Benaki Phytopathological Institute, Kiphissia, Athens, Greece, 347 pp.
- Hughes, A.M. 1948. The Mites Associated with Stored Food Products. Ministry of Agriculture and Fisheries, London. H.M. Stationary Office, 168 pp.
- Oudemans, A.C. 1915. Acarologische Aanteekeningen LVI. Entoml. Berichten 4: 180:188.
- Papadoulis, G. Th. and N.G. Emmanuel. 1993. New records of phytoseiid mites from Greece with descriptions of two new species of *Typhlodromus* Scheuten (Acarina: Phytoseiidae). Internat. J. Acarol (In press).
- Ragusa, S. 1977. Notes on phytoseiid mites in Sicily with description of a new species of *Typhlodromus* (Acarina: Mesostigmata). Acarologia 18: 379-392.
- Wainstein, B.A. 1961. New species of mites of the genus *Typhlodromus* (Parasitiformes: Phytoseiidae) in Georgia. Trudy Instituta Zoologii Akademii Nauk Gruzinskoy SSR 18: 153-162 (in Russian).

KEY WORDS: Cyprus, predacious mites, Phytoseiidae.

## Νέες Αναφορές Ακάρων Phytoseiidae από την Κύπρο

S. AMITAI

Department of Entomology, Agricultural Research Organization, The Volcani Center,  
P.O. Box 6, Bet Dagan 50250, Israel

### ΠΕΡΙΛΗΨΗ

Επτά είδη ακάρων Phytoseiidae καταγράφηκαν για πρώτη φορά σε διάφορα φυτά στην Κύπρο: *Amblyseius barkeri* (Hughes), *Euseius scutalis* (Athias-Henriot), *Euseius finlandicus* (Oudemans), *Typhlodromus leptodactylus* Wainstein, *Typhlodromus exhilaratus* Ragusa, *Typhlodromus phialatus* Athias-Henriot, *Typhlodromus carmonae* Chant and Toshida-Shaul.