

ISSN 1821-1046

UDK 630

INSTITUTE OF FORESTRY
BELGRADE



INSTITUT ZA ŠUMARSTVO
BEOGRAD

SUSTAINABLE FORESTRY ODRŽIVO ŠUMARSTVO

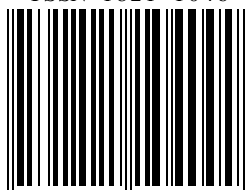
COLLECTION
TOM 63-64

ZBORNİK RADOVA
TOM 63-64



BELGRADE BEOGRAD
2011.

ISSN 1821-1046



9 771821 104000

ISSN 1821-1046
UDK 630

**INSTITUTE OF FORESTRY
BELGRADE**



**INSTITUT ZA ŠUMARSTVO
BEOGRAD**

SUSTAINABLE FORESTRY

COLLECTION
TOM 63-64

ODRŽIVO ŠUMARSTVO

ZBORNİK RADOVA
TOM 63-64

**BELGRADE BEOGRAD
2011.**

INSTITUTE OF FORESTRY BELGRADE **INSTITUT ZA ŠUMARSTVO BEOGRAD**

PROCEEDINGS **ZBORNİK RADOVA**

Publisher

Institute of Forestry
Belgrade, Serbia

Izdavač

Institut za šumarstvo
Beograd, Srbija

For Publisher

Ljubinko Rakonjac, Ph.D.

Za izdavača

Dr Ljubinko Rakonjac

Editorial Board

Snežana Rajković, Ph.D.
Institute of Forestry, Belgrade
Dragana Dražić, Ph.D.
Institute of Forestry, Belgrade
Ljubinko Rakonjac, Ph.D.
Institute of Forestry, Belgrade
Mara Tabaković-Tošić, Ph.D.
Institute of Forestry, Belgrade
Miloš Koprivica, Ph.D.
Institute of Forestry, Belgrade
Radovan Nevenić, Ph.D.
Institute of Forestry, Belgrade
Mihailo Ratknić, Ph.D.
Institute of Forestry, Belgrade
Zoran Miletić, Ph.D.
Institute of Forestry, Belgrade
Milorad Veselinović, Ph.D.
Institute of Forestry, Belgrade
Biljana Nikolić, Ph.D.
Institute of Forestry, Belgrade
Vesna Golubović-Čurguz, Ph.D.
Institute of Forestry, Belgrade
Assoc. Prof. Iantcho Naidenov, Ph.D.
Bulgaria
Prof. Nikola Hristovski, Ph.D.
Macedonia
Dr Kalliopi Radoglou, Ph.D.
Greece

Redakcioni odbor

Dr Snežana Rajković
Institut za šumarstvo, Beograd
Dr Dragana Dražić
Institut za šumarstvo, Beograd
Dr Ljubinko Rakonjac
Institut za šumarstvo, Beograd
Dr Mara Tabaković-Tošić
Institut za šumarstvo, Beograd
Dr Miloš Koprivica
Institut za šumarstvo, Beograd
Dr Radovan Nevenić
Institut za šumarstvo, Beograd
Dr Mihailo Ratknić
Institut za šumarstvo, Beograd
Dr Zoran Miletić
Institut za šumarstvo, Beograd
Dr Milorad Veselinović
Institut za šumarstvo, Beograd
Dr Biljana Nikolić
Institut za šumarstvo, Beograd
Dr Vesna Golubović-Čurguz
Institut za šumarstvo, Beograd
Assoc. Prof. Dr Iantcho Naidenov
Bugarska
Prof. Dr Nikola Hristovski
Makedonija
Dr Kalliopi Radoglou
Grčka

Chief Editor

Snežana Rajković, Ph.D.

Glavni i odgovorni urednik

Dr Snežana Rajković

Technical Editor and Layout

Tatjana Čirković-Mitrović, M.Sc.

Tehnički urednik i prelom teksta

Mr Tatjana Čirković-Mitrović

Secretary

Tatjana Čirković-Mitrović, M.Sc.

Sekretar Zbornika

Mr Tatjana Čirković-Mitrović

Printed in

150 copies

Tiraž

150 primeraka

Printed by

Klik tim DOO
Beograd

Štampa

Klik tim DOO
Beograd

All rights reserved. No part of this publication might be reproduced by any means: electronic, mechanical, copying or otherwise, without prior written permission of the publisher.

Belgrade, 2011

Preuzimanje članaka ili pojedinih delova ove publikacije u bilo kom obliku nije dozvoljeno bez odobrenja

Beograd, 2011

Cover Page: Author of the Photos Tatjana Ćirković-Mitrović, M.Sc.

Naslovna strana: Autor fotografije mr Tatjana Ćirković-Mitrović

CIP – Каталогизација у публикацији
Народна библиотека Србије, Београд

630

SUSTAINABLE Forestry : collection =
Održivo šumarstvo = zbornik radova / chief
editor = glavni i odgovorni urednik Snežana
Rajković. - 2008, T. 57/58- . - Belgrade
(Kneza Višeslava 3) : Institute of forestry,
2008- (Beograd : Klik tim). - 24 cm

Godišnje. - Je nastavak: Zbornik radova -
Institut za šumarstvo = ISSN 0354-1894
ISSN 1821-1046 = Sustainable Forestry
COBISS.SR-ID 157148172

SADRŽAJ CONTENTS

TOM 63-64

<i>Vladan POPOVIĆ, Vera LAVADINOVIĆ</i> DEPENDENCE OF DOUGLAS-FIR MEAN DIAMETER ON GEOGRAPHIC ORIGIN OF CANADIAN PROVENANCES IN SEEDLING NURSERY CONDITIONS	7
<i>Snežana STAJIĆ, Vlado ČOKEŠA, Zoran MILETIĆ, Ljubinko RAKONJAC</i> CHANGES IN THE GROUND FLORA COMPOSITION OF ARTIFICIALLY ESTABLISHED EASTERN WHITE PINE, DOUGLAS-FIR AND LARCH STANDS AT THE SITE OF HUNAGRIAN OAK AND TURKEY OAK WITH HORNBEAM	17
<i>Milorad VESELINOVIĆ, Dragana DRAZIĆ, Biljana NIKOLIĆ, Suzana MITROVIĆ, Nevena CULE, Marija NESIĆ</i> SEED GERMINATION ANALYSIS IN ORDER TO IMPROVE THE PRODUCTION OF SEEDLINGS	27
<i>Svetlana BILIBAJKIĆ, Tomislav STEFANOVIĆ, Radovan NEVENIĆ, Zoran PODUŠKA, Renata GAGIĆ SERDAR, Ilija DJORDJEVIĆ, Goran ČEŠLJAR</i> THE INTENSITY OF EROSION IN THE CATCHMENT OF THE TORRENT LEŠJANSKI DO	33
<i>Ljiljana BRASANAC-BOSANAC, Tatjana CIRKOVIC-MITROVIC, Nevena CULE</i> ADAPTATION OF FOREST ECOSYSTEMS ON NEGATIVE CLIMATE CHANGE IMPACTS IN SERBIA	41
<i>Nevena CULE, Ljubinko JOVANOVIĆ, Dragana DRAZIC, Milorad VESELINOVIĆ, Suzana MITROVIC, Marija NESIĆ</i> INDIAN SHOOT (CANNA INDICA L.) IN PHYTOREMEDIATION OF WATER CONTAMINATED WITH HEAVY METALS	51
<i>Radovan NEVENIĆ, Svetlana BILIBAJKIC, Tomislav STEFANOVIĆ, Zoran PODUSKA, Renata Gagić SERDAR, Ilija ĐORĐEVIĆ, Goran ČEŠLJAR</i> FOREST CONDITION MONITORING: INTENSIVE MONITORING OF AIR POLLUTION IMPACT ON FOREST ECOSYSTEMS AT LEVEL II SAMPLE PLOT KOPAONIK	65
<i>Suzana MITROVIĆ, Milorad VESELINOVIĆ, Dragica VILOTIĆ, Nevena ČULE, Dragana DRAŽIĆ, Biljana NIKOLIĆ, Marija NESIĆ</i> TEMPORARY DEPOSITED OF DEPOSOL AS THE POSSIBLE AREA FOR SHORT ROTATION PLANTATION ESTABLISHMENT – MODEL CASE	77

<i>Miloš KOPRIVICA, Bratislav MATOVIĆ</i> RELIABILITY OF THE STAND REGRESSION MODELS DEVELOPED ON THE BASIS OF SAMPLE PLOTS	87
<i>Mara TABAKOVIĆ-TOŠIĆ</i> GYPSY MOTH PREDATORS, PARASITES AND PATHOGENS IN BELGRADE FORESTS IN THE PERIOD 2010-2011	101
<i>Mara TABAKOVIĆ-TOŠIĆ, Dragutin TOŠIĆ, Miroslava MARKOVIĆ, Katarina MLADENOVIĆ, Zlatan RADULOVIĆ, Snežana RAJKOVIĆ</i> GYPSY MOTH OUTBREAKS IN FOREST COMPLEXES OF THE BELGRADE REGION IN THE PERIOD 1996-2011	113
<i>Miroslava MARKOVIC, Snezana RAJKOVIC, Katarina MLADENOVIC</i> SIMULTANEOUS ATTACK OF LYMANTRIA DISPAR L. AND MICROSPHAERA ALPHITOIDES GRIFF. ET MAUBL. ON QUERCUS SPECIES (Q. CERRIS, Q. FARNETTO AND Q. PETRAEA) IN CERTAIN PARTS OF SERBIA FROM 2004 TO 2006	123
<i>Katarina MLADENOVIĆ, Bojan STOJNIĆ, Miroslava MARKOVIĆ</i> SPIDER MITES AND PREDATORY MITES (ACARI: TETRANYCHIDAE, PHYTOSEIIDAE) ON OAK TREES IN THE CITY OF BELGRADE AND ITS VICINITY	133
<i>Vesna GOLUBOVIĆ ĆURGUZ, Zoran MILETIĆ</i> SOIL EXAMINATION FOR THE PURPOSE OF FORECASTING OCCURRENCE OF ENTOMOPATHOGENIC AND BENEFICIAL MICROORGANISMS	141
<i>Ilija DJORDJEVIĆ, Radovan NEVENIĆ, Zoran PODUŠKA, Renata GAGIĆ, Goran ČEŠLJAR, Svetlana BILIBAJKIĆ, Tomislav STEFANOVIĆ</i> ASSESSMENT OF THE SYSTEM FOR MANAGING PROTECTED AREAS IN THE REPUBLIC OF SERBIA	151
<i>Zoran PODUŠKA, Svetlana BILIBAJKIĆ, Renata GAGIĆ-SERDAR, Goran ČEŠLJAR, Ilija ĐORĐEVIĆ, Tomislav STEFANOVIĆ, Radovan NEVENIĆ</i> IMPACT OF INNOVATIVENESS ON NEW TECHNOLOGY IMPLEMENTATION IN FORESTRY COMPANIES	161

UDK 630*459:595.4(497.11 Beograd)=111
Preliminary communication

**SPIDER MITES AND PREDATORY MITES (ACARI: TETRANYCHIDAE,
PHYTOSEIIDAE) ON OAK TREES IN THE CITY OF BELGRADE AND
ITS VICINITY**

Katarina MLADENović¹, Bojan STOJnić², Miroslava MARKović¹

Abstract: *This paper presents preliminary research of diversity of fam. Tetranychidae and fam. Phytoseiidae on different oak species in the city of Belgrade and its vicinity in the period from 2010 to 2011. The study covers six different tree species from genus Quercus, four indigenous and two introduced species. The presence of two species of mite from Tetranychidae family, and three species from Phytoseiidae family has been verified so far.*

Key words: Tetranychidae, Phytoseiidae, *Quercus*

**PAUČINARI I PREDATORSKE GRINJE (ACARI: TETRANYCHIDAE,
PHYTOSEIIDAE) NA HRASTOVIMA ŠIREG PODRUČJA BEOGRADA**

Sažetak: *U rada su izneta prelaminarna istraživanja diverziteta vrsta fam. Tetranychidae i fam. Phytoseiidae na različitim vrstama hrasta u Beogradu i njegovoj široj okolini u periodu 2010-2011. godine. Pregledom je obuhvaćeno šest različitih biljnih vrsta iz roda Quercus od čega su četiri autohtone a dve alohtone. Do sada je utvrđeno prisustvo dve vrste grinja iz fam. Tetranychidae i tri vrste iz fam. Phytoseiidae.*

Ključne reči: Tetranychidae, Phytoseiidae, *Quercus*

¹ Institute of Forestry, Belgrade, Serbia

² Faculty of Agriculture, University of Belgrade, Belgrade, Serbi

Translation: Galina Perišić

1. INTRODUCTION

Problems with mites as pests emerged in mid-20th century as a result of changes in environmental conditions, particularly apparent in urban areas due to the huge impact of the human factor. In urban conditions, due to unstable soil moisture, increased air pollution and temperature, plants become physiologically weakened and more susceptible to development of phytophagous mite, while in natural conditions plants rarely suffer severe damage since the numbers of mites are controlled by their natural enemies.

In Serbia, the studies of spider mites (Acari: Tetranychidae) and their predators (Acari: Phytoseiidae) have so far been mainly focused on agricultural ecosystems since the diversity of these mite species is less apparent on forest trees. A number of papers discuss occurrence of spider and predatory mites on forest plant species (Tomašević, 1964; Kropczynska and Petanović, 1987; Petanović and Stojnić, 1995; Stojnić and Petanović, 1994; Stojnić, 1993; Stojnić et al., 2002; Mladenović et al., 2010a, 2010b).

Oaks typically inhabit temperate region of the northern hemisphere. The *Quercus* genus includes around 450 tree and shrub species but only about ten of those 450 are present in our region. Oaks are one of the most important groups of forest plants in our country.

2. MATERIALS AND METHODS

Oak tree samples were collected during the vegetation period in the years 2010 and 2011, in autochthonous plant associations and in urban areas of Belgrade.

Belgrade is situated within the southern rim of the Pannonian basin and the northern border of the Balkan Peninsula. The northern part of the city area is located within the Pannonian plain, and the southern part lies on the rolling hills of Central Serbia. Mountains Avala (511 m) and Kosmaj (628 m) stand out in the relief of Šumadija region. The terrain gradually declines from south to north and is patched with river valleys. Belgrade hills (Banovo, Lekino, Topčidersko, Julino, Petlovo etc.) are located to the south of the Sava and Danube rivers, and alluvial planes and loess plateaus stretch to the north of the Sava and Danube. The city's average altitude is 132 m, with the lowest elevation in Grocka (71 m) and the highest elevation on Mt. Kosmaj. Belgrade has a temperate continental climate. Average annual temperatures vary from year to year due to the human factor impact and global warming (Faculty of Geography, Belgrade, 2011).

Samples were collected from six oak species: *Quercus robur* L., *Q. petraea* Liebl., *Q. frainetto* Ten., *Q. cerris* L., *Q. borealis* Michx. f., *Q. trojana* Webb.

Each sample contained 50 leaves. The samples were collected during the vegetation period. Separation of Tetranychidae and Phytoseiidae was carried out in laboratory by exposing the leaves to ethyl-acetate for 20 minutes, after which the leaves were shaken off and mites were recognized by means of a stereomicroscope. Isolated mite organisms were placed in solution of ethyl alcohol and lactic acid (Evans & Browing, 1955). After illumination, permanent preparations were made using Hoyer's medium (Baker & Wharton, 1964).

The appropriate keys were used to determine Tetranychidae (Prichard and Baker, 1955; Mitrofanov et al., 1987; Rota, 1961-62; Manson, 1967; Reeves, 1963) and Phytoseiidae (Begljarov, 1981; Karg, 1993). Permanent preparations were kept in storage at the Department of Entomology and Agricultural Zoology of the Faculty for Agriculture, University of Belgrade.

3. RESULTS AND DISCUSSION

Examination of the plant material showed the presence of two species of spider mites fam. Tetranychidae on two studied oak species: *Q. robur* and *Q. cerris*. Predatory mite species from Phytoseiidae family were found on all six studied oak species: *Q. robur*, *Q. petraea*, *Q. frainetto*, *Q. cerris*, *Q. borealis* and *Q. trojana*. Table 1 presents the Tetranychidae species found on oak tree species. Table 2 presents the Phytoseiidae species found on oak tree species.

3.1. Tetranychidae family

Table 1. *Species from Tetranychidae family found on Q. robur and Q. cerris*

Oak Species	Tetranychidae Species	Location
<i>Quercus robur</i>	<i>Schizotetranychus garmani</i>	Ada Ciganlija
	<i>Oligonychus brevipodus</i>	Ada Ciganlija, Banovo Brdo Park, Banjica Forest, Pionirski Park
<i>Quercus cerris</i>	<i>Oligonychus brevipodus</i>	Košutnjak Park Forest

Schizotetranychus garmani Pritchard & Baker, 1955

Typical distribution location of this species is in the USA and its typical host is *Salix sp.* It is also found worldwide on eight hosts: *Acer sp.*, *Quercus robur*, *Populus tremula*; *Salix caprea*; *Salix humilis*; *Salix petiolaris*; *Salix sp.*; *Salix tristis*.

Distribution of this species encompasses Nearctic: USA; Palaearctic: Iran, Poland, Russia and Switzerland.

In Serbia it was first found on *Q. robur*, *Salix alba*, *Acer negundo* and *Corylus avellana* (Stojnić, 1993). During this research it was also found on *Q. robur*.

Oligonychus brevipodus Targioni Tozzetti, 1878

sin. *Oligonychus quercinus* Berlese, 1886

This species has not been sufficiently studied. Its typical distribution location is in Italy, while the typical host is *Quercus ilex*. It is also found worldwide on *Quercus ilex*; *Quercus pubescens*; *Quercus sp.*

Distribution of this species includes the Australian region: Australia, New Zealand, Tasmania; Palaearctic: France, Italy, Holland and the United Kingdom.

In Serbia it was first found on *Q. robur* and *Q. cerris* (Stojnić, 1993). During this research, the finding was confirmed both on *Q. robur* and *Q. cerris*.

3.2. Phytoseiidae Family

Table 2. *Species from Phytoseiidae family found on Q. robur, Q. cerris, Q. frainetto, Q. petraea, Q. trojana and Q. borealis*

Oak Species	Phytoseiidae Species	Location
<i>Quercus robur</i>	<i>Euseius finlandicus</i>	Košutnjak Park Forest, Ada Ciganlija, Rit, Progarska Ada, Bojčin Forest, Barajevo-Šiljakovac, Banjica Forest, Kalimegdan Park, Lazarevac-REIK
	<i>Kampimodromus aberans</i>	Banjica Forest
<i>Quercus cerris</i>	<i>Euseius finlandicus</i>	Lipovica –Bivolje Swamps, Košutnjak Park Forest, Miljakovac Forest, Sremački Rit, Bojčin Forest
<i>Quercus frainetto</i>	<i>Euseius finlandicus</i>	Lipovica – Bivolje Swamps, Topčider Park, Košutnjak Park Forest, Sremački Rit, Lazarevac-REIK
	<i>Amblyseius andersoni</i>	Lazarevac-REIK
	<i>Kampimodromus aberans</i>	Lazarevac-REIK
<i>Quercus petraea</i>	<i>Euseius finlandicus</i>	Miljakovac Forest
<i>Quercus trojana</i>	<i>Euseius finlandicus</i>	Faculty of Forestry Arboretum
<i>Quercus borealis</i>	<i>Euseius finlandicus</i>	Savski Venac-Emergency Center

Euseius finlandicus Oudemans, 1915

This species is a distinct cosmopolite, distributed across Europe, Asia, Africa, North and South America. It is observed in Serbia on numerous hosts (Radivojević and Petanović, 1984; Kropczynska and Petanović, 1987; Stojnić, 1993; Stojnić and Petanović, 1994; Stojnić, 2001; Mladenović at al, 2010b). It can be assumed that this species is dominant in Phytoseiidae habitats. It occurs on many plant species. During this study it was identified on all six oak species: *Q. robur*, *Q. petraea*, *Q. frainetto*, *Q. cerris*, *Q. borealis* and *Q. trojana*.

Amblyseius (Amblyseius) andersoni Chant, 1957

This species is present in most of Europe, Algeria, Canada, USA and former Soviet Republics. It is found in Serbia as well (Radivojević and Petanović, 1984; Kropczynska and Petanović, 1987; Mladenović at al, 2010b). It is found on numerous woody and herbaceous plants. During this research its presence was confirmed on *Q. frainetto*.

Kampimodromus aberrans Oudemans, 1930

This species is present in most of Europe, Algeria, Canada, USA and former Soviet Republics. It is found in Serbia as well (Radivojević and Petanović, 1984; Kropczynska and Petanović, 1987; Stojnić, 1993; Stojnić and Petanović 1994; Mladenović at al, 2010b). It is found on numerous woody and herbaceous plants. During this research its presence was confirmed on two oak species *Q. robur* and *Q. frainetto*.

4. CONCLUSIONS

This paper presents preliminary research of mite species diversity from fam. Tetranychidae and fam. Phytoseiidae on different oak species in the city of Belgrade and its vicinity.

The study covered six oak species: *Quercus robur* L., *Q. petraea* Liebl., *Q. frainetto* Ten., *Q. cerris* L., *Q. borealis* Michx. f., *Q. trojana* Webb., four species of which are indigenous (Sessile oak, English oak, Turkey oak and Hungarian oak) and two of which are introduced species (Macedonian oak and red oak).

The study confirmed the presence of two species of spider mites fam. Tetranychidae on English oak and Turkey oak, and three species of predatory mite fam. Phytoseiidae on all six examined oak species.

Tetranychidae are present on oak trees in the inner city central area, while Phytoseiidae were mostly found in natural plant associations in the vicinity of Belgrade.

REFERENCES

- Baker, E. W. and Wharton, G. W. 1964. *An introduction to acarology*, Macmillan Co., N.Y. 465 pp
- Begljarov, G. A. 1981. *Key for identification of the predacious mites Phytoseiidae (Parasitiformes, Phytoseiidae) in the fauna of the USSR*, Information Bulletin EPS IOBC, 3: 141pp
- Berlese, A. 1916. *Centuria prima-sesta di Acari nuovi*, Redia 12: 19-67
- Chant, D.A. & Athias-Henriot, C. 1960. *The genus Phytoseius Ribaga, 1902 (Acarina: Phytoseiidae)*. Entomophaga, Vol. 5, No 3 / September, 1960/ 213-228
- DeMoraes, G. J., McMurtry, J. A. & Denmark, H. A. 1986. *A catalog of the family Phytoseiidae*. References to taxonomy, synonymy, distribution and habitat, EMBRAPA, Brasilia, Brazil, 353 pp
- Evans, G. O. & Browing, E. 1955. *Techniques for the preparation of mites for study*. Ann. Mag. Nat. Hist. 8 (12): 631-635.
- Faculty of Geography, Belgrade 2011. *Local Waste Management Plan for the City of Belgrade 2011-2020*
- Karg, W. 1993. *Raubmilben. Acari (Acarina), Milben Parsitiformes (Anactinochaeta) Cohors Gamasina*
- Kostiainen, T. S. & M. A. Hoy 1996. *The Phytoseiidae as biological control agents of pest mites and insects*, a Bibliography. Monograph 17, University of Florida, 355 pp
- Kropczynska, D. & Petanović, R. 1987. *Contribution to the knowledge of the predacious mites (Acarida, Phytoseiidae) of Yugoslavia*, Biosistematika, Vol. 13, No. 1: 81-86
- Lundqvist, L. 2009. *Fauna Europaea: Acari, Phytoseiidae*. Fauna Europ. version 2.1, <http://www.faunaeur.org>
- Manson, D.C.M. 1967. *The spider mite family Tetranychidae in New Zealand*. Acarologia, T. IX
- Migeon, A., Dorkeld, F. 2006-2010. *Spider Mites Web: a comprehensive database for the Tetranychidae*, <http://www.montpellier.inra.fr/CBGP/spmweb>
- Mitrofanov, V. I., Strunkova, Z.I., Livsic, I.Z. 1987. *Opredelitelj teraniovih klesci fauni SSSR i sopedeljnih stran*. Dusanbe, 223 pp

- Mladenović, K., Stojnić, B., Radulović, Z., Vidović, B. 2010a. *Two new species from the genus Dubininellus Wainstein (Acari, Phytoseiidae) in the Serbian fauna*. International scientific conference, Forest ecosystems and climate changes, 9-10 March, Belgrade, Serbia, Proceedings book, pp 169-174
- Mladenović, K., Stojnić, B., Radulović, Z. 2010b. *Fauna of predatory mites (ACARI: PHYTOSEIIDAE) in the artificially established stands on the reclaimed mine soils*. Sustainable Forestry, Collection Vol. 61-62, Institute of Forestry Belgrade
- Moraes, G. J. de; McMurtry J. A.; Denmark H. A. & Campos C. B. 2004. *A revised catalog of the mite family Phytoseiidae*. Zootaxa 434: 1-494
- Muma, M. H. 1961. *Subfamilies, genera and species of Phytoseiidae (Acarina: Mesostigmata)*. Bull. Fla. State Mus., Biol. Sci. 5(7): 267-302
- Muma, M.H. 1963. *Generic Synonymy in the Phytoseiidae (Acarina: Mesostigmata)*. The Florida Entomologist, Vol. 46, No. 1 (Mar., 1963), pp 11-16
- Petanović, R., Stojnić, B. 1995. *Diversity of Phytophagous and Predatory Mites (Eriophyoidea, Tetranychidae & Phytoseiidae, Acari) of Yugoslavia*. In: STEVANOVIC, V. AND V. VASIC eds. (1995) Biodiversity of Yugoslavia with a review of internationally significant species, Faculty of Biology, Belgrade pp 349-361. (in Serbian)
- Pritchard, A. E., Baker, E. W. 1955. *A Revision of the Spider Mite Family Tetranychidae*. Pacific Coast Ent. Soc., Memoirs Series Vol. 2, pp 199
- Prpic, N.M. 2008. *Familia Phytoseiidae, Repository: a Web repository of information about the Metazoa of Germany*. Online publication at <http://wwwuser.gwdg.de/~nprpic/webrepository>
- Radivojević, M., Petanović, R. 1984. *Contribution to the knowledge of the phytoseiid fauna (Acarina: Mesostigmata) of Yugoslavia*. Glasnik zastite bilja, 7 (9-10), 351
- Ribaga, C 1902. *Gamasidi planticoli*. Riv. di Patologica Vegetale, 10: 175-178
- Rota, P. 1961-62. *Osservazione sugli Acari Tetranychidi dannosi alle piante coltivate ed ornamentali in Italia*. Offic. Graf. Calderini, Bologna. Estratto dal Boll. Zool. Agr. E di Bachicolt., serie II, Vol. 4, pp. 31-145
- Stojnić, B. 1993. *Comparative faunistic and taxonomic analysis of spider mites (Acari: Tetranychidae) and their predators (Acari: Phytoseiidae) on cultivated and ornamental plants in Belgrade region*. M.Sc. thesis, Belgrade, 136 pp (in Serbian)
- Stojnić, B., Petanović, R. 1994. *A Comparative Faunistic Analysis of Eriophyid Mites (Acari: Eriophyoidea) and Phytoseiid Mites (Acari: Phytoseiidae)*. In: Šestovic, M., N. Nešković and I. Perić (eds.) (1994) Plant protection today and tomorrow, Plant Protection Society of Serbia, 355-360 (in Serbian)
- Stojnić, B., Panou, H., Papadoulis, G., Petanović, R., Emmanouel, N. 2002. *The present knowledge and new records of phytoseiid and tydeid mites (Acari: Phytoseiidae, Tydeidae) for the fauna of Serbia and Montenegro*. Acta entomologica serbica, 7(1/2): 111-117
- Tomašević, B. 1964. *The Yellow Poplar Mite, Eotetranychus populi Koch*, Plant protection, 15 (82): 687-694
- Wainstein, B. A. 1959. *Novyi podrod i vid roda Phytoseius Ribaga, 1902 (Phytoseiidae, Parasitiformes)*. Zool. J., 38 (9), 1361-1365

Wainstein, B. A. 1973. *Predatory mites of the family Phytoseiidae (Prasitiformes) of the fauna of the Moldavian SSR*. Fauna i biologiya nasekomykh Moldavii, 12: 176-180

Reviewer: Ph.D. Slobodan Milanović

