

UDK 632.9

YU ISSN 0372-7866

INSTITUT ZA ZAŠTITU BILJA I ŽIVOTNU SREDINU –BEOGRAD
INSTITUTE FOR PLANT PROTECTION AND ENVIRONMENT-BELGRADE

ZAŠTITA BILJA PLANT PROTECTION

VOL. 52 (2), N° 236, 2001.

Zaštita bilja

Vol. 52 (2)

N° 236 (str. 71-135)

Beograd, 2001.

CONTENTS

Scientific papers

- R. Jevtić*
Occurrence and Significance of *Pyrenophora tritici – repentis* in Serbia 75-84
- S. Jasnić, Tajana Đurić, J. Sabo*
Verticillium Wilt of Hop in Voivodina 85-97
- Zorka Dulić Stojanović, Branka Stevanović, Radmila Petanović*
Morphological and Anatomical Alterations of
Common Walnut Leaves Caused by Eriophyids
Aceria erinea and *Aceria tristriata* 99-114
- A. Stojanović, Č. Marković*
Biodiversity and Significance of the Parasitoids
of *Scolytus rugulosus* 115-122

Book Reviews

- K. Špatenka, K. Gorbunov, A. Laštuvka, I. Toševski, Y. Arita*
Handbook of Palaearctic Macrolepidoptera, Vol. 1,
Sesiidae (Lepidoptera: Dytrisia) 123
- D. Šutić, Dragoslava Radin*
Microbiology – Microorganisms in Plant Life 126

BIODIVERSITY AND SIGNIFICANCE OF THE PARASITIDS *Scolytus rugulosus*

ALEKSANDAR STOJANOVIĆ¹, ČEDOMIR MARKOVIĆ²

¹Natural History Museum, Belgrade

²Faculty of Forestry, Belgrade University, Belgrade

The parasitoid complex of *Scolytus rugulosus* Müller includes 11 species of six families of Hymenoptera: *Doryctes pomarius* Reinhard, *Dendrosoter protuberans* Ness., *Spathius brevicaudis* Ratzeburg, *Ecphylyus silesiacus* Ratzeburg (Braconidae), *Eurytoma morio* Boheman (Eurytomidae), *Cheiopachus quadrum* F., *Rhaphitelus maculatus* Walker (Pteromalidae), *Calosota aestivalis* Curtis (Eupelmidae), *Tetrastichus ulmi* Erdős, *Entedon ergias* Walker (Eulophidae), *Scleroderma domesticus* Klug (Bethyilidae).

Among the abovementioned parasitoids, the species *Rhaphitelus maculatus* had the greatest influence on *S. rugulosus* abundance. It was identified in 73.7 % of examined samples, its average domination was 53.7 %, and average percent of *S. rugulosus* parasitism was 23.9 %. Besides, the species *Ecphylyus silesiacus*, *Cheiopachus quadrum*, *Entedon ergias* and *Eurytoma morio* had a strong effect on *S. rugulosus* abundance. The significance of other parasitoids was low.

Parasitoids have a great influence on the abundance of *S. rugulosus* because they reduce the abundance of their host 44.5 % on average.

Key words: *Scolytus rugulosus*, parasitoids, shot-hole borer.

INTRODUCTION

Shot-hole borer *Scolytus rugulosus* Müller (Coleoptera, Scolytidae) is a polyphagous species distributed in Europe, Asia Minor, Siberia, Turkestan, North Africa, North America (where it was introduced in 1834), Argentina, Chile and Peru (Balaschowsky, 1949; Stark, 1952; Nunberg, 1954; Lekander et al., 1977). It develops on physiologically weakened and freshly cut branches *Amelanchier ovalis* Med., *Crataegus oxyacantha* L., *C. melanocarpa* M. Bieb., *C. orientalis* Pall., *Cydonia oblonga* Mill., *Malus* spp., *Mespilus germanica* L., *Persica vulga-*