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NEW RECORDS OF THE POTATO CYST NEMATODES IN SERBIA

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SUMMARY

Specimens of *Globodera pallida* Stone, 1973 were found in potato fields and roots of potato at Javor (Kušiči) at the localities of Šanac and Kladnica. Specimens of *Globodera rostochiensis* (Walen., 1923) Behrens, 1975 were found in potato fields on potato roots at Gojna gora (Poljoprmet), Stranjanci, Milatovići, Kotraž (Dragačevo), TP Jagodnja and PEK Komerc.

Both species were found at the localities of Ograđenik (Javor Kušiči) and Milatovići (Ćurčić Stevan) in Western Serbia.

This is the first record of *Globodera pallida* Stone, 1973 in Serbia.

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THE INVESTIGATION OF FUNGICIDE EFFICIENCY IN CONTROLLING *MONILINIA LAXA* ON SOUR CHERRY

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SUMMARY

The parasite *M. laxa* has big temperature amplitudes (5-30°C) and very high demands for humidity for sporulation and infection. The combination of preparations Benfungin + Ronilan (0,15%) showed the highest efficiency in pathogen control in two-year-field experiment (96,6% and 99,4% in 2000 and 2001, respectively). The other combinations of preparations: Konker, Galovit + Mankogal and Benfungin + Mankogal were less effective in 2000 (81,1 - 89,3%), but very high efficiency were achieved in 2001 (93,7-95,8%). The lowest efficiency was achieved by use of single preparation Saprul (0.125%): 79,7 and 88,3% in 2000 and 2001, respectively.

The priority in choice of fungicide for the control of *M.laxa*, should be given to the combination of systemic and protective fungicides rather than to an individual fungicide. The combinations of fungicides had shown high efficiency in 2000 year with two treatments, and in 2001 very with a lot of moist with three treatments. The examined combinations of fungicides showed high efficiency in pathogen control on sour cherry, and at the same time, they provide protection from primary and early secondary infections of sour cherry leaves, which is caused by the parasite *Brumeriella jaapii*.

It is achieved the significant efficiency in 2000 (66,7%) and slightly better efficiency in 2001 (69,5%) using mechanical measures.

The present results showed that the problem of moniliosa on sour cherry can in successful way be solved with both forehand application of chemical and mechanical measures of protection.

Key words: *Monilinia laxa*, sour cherry, control, fungicides efficiency

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NEW HOSTS OF *COLLETOTRICHUM* SPECIES IN SERBIA

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SUMMARY

On the fruits of *Cucurbita pepo* L. var. *ovifera* and *Prunus domestica* L. and leaves of *Hedera helix* L. the presence of *Colletotrichum orbiculare*, *C. gloeosporioides* and *C. trichellum* were registered. The mentioned plants are new hosts of the species from the genus *Colletotrichum* in Serbia, while *C. trichellum* is a new species for our micoflora.

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INVESTIGATION ON ATRAZINE RESISTANCE IN DIFFERENT POPULATIONS OF *CHENOPODIUM ALBUM* L. AND *AMARANTHUS RETROFLEXUS* L. USING NONDESTRUCTIVE METHODS

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The aim of our investigation was to establish the level of atrazine resistance of *Chenopodium album* L. and *Amaranthus retroflexus* L. populations collected from different localities in Serbia. Resistant population of the same weed species from Great Britain was used as a known reference. We measured chlorophyll *a* fluorescence and relative chlorophyll content using SPAD-meter, as a nondestructive method in order to compare the resistance in weed species. Our results showed that chlorophyll fluorescence was most sensitive method for distinguishing triazine resistant and susceptible plants compared with SPAD-Meter. In the populations of *Chenopodium album* L. and *Amaranthus retroflexus* L. – collected from Zemun Polje, Surcin and Belgrade atrazine resistance was not confirmed.

Key words: Atrazine, resistance, *Chenopodium album* L., *Amaranthus retroflexus* L., Spad-meter, chlorophyll fluorescence *a*.

INTRODUCTION

Resistance in weeds, as a natural phenomenon or caused by herbicide application is a challenge for science and agricultural production, as well. The study on different mechanisms of resistance in weeds is very important because herbicide application is the main method of weed control in agricultural production. Inappropriate use of herbicides with the same or similar modes of