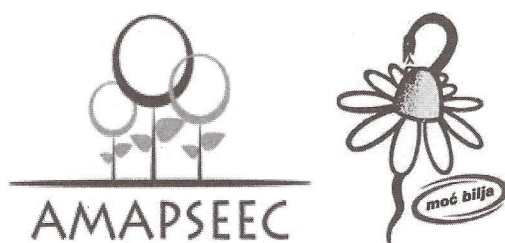


7th CMAPSEEC

Conference on Medicinal and Aromatic Plants
of Southeast European Countries



BOOK OF ABSTRACTS

27th -31st May, 2012.

Subotica, Republic of Serbia.

- ACKNOWLEDGEMENTS:** This publication is published with financial support of the Ministry of Education and Science of Republic of Serbia.
- EDITED BY:** Institute for Medicinal Plants Research "Dr Josif Pančić"
Tadeuša Košćuška 1, 11000 Belgrade
Republic of Serbia
www.mocbilja.rs
&
Association for Medicinal and Aromatic Plants of
Southeast European Countries (AMAPSEEC)
Tadeuša Košćuška 1, 11000 Belgrade
Republic of Serbia
www.amapseec.org
- EDITOR IN CHIEF:** Dr Tatjana Lj. Marković
- CO-EDITOR:** Prof dr Zora P. Dajić Stevanović
- COVER DESIGN:** Dr Tatjana Lj. Marković
Nikola Vukelić, BB-Soft, nikola@bbsoft.rs
- PRESS:** "TON PLUS" d.o.o.
Panta Tutundžića 10, 11000 Belgrade
Republic of Serbia.
- CIRCULATION:** 300 copies
- ISBN:** 978-86-83141-15-9
- COPYRIGHTS:** Public heritage
- DISCLAIMER:** The Organizers are not responsible for the scientific content of the contributions or linguistic errors within the volume.

HEAVY METALS CONTENT IN *VACCINIUM* SPECIES FROM SOME REGIONS IN SERBIA

Bjedov R. Ivana, Obratov Petković D. Dragica, Belanović B. Snežana

University of Belgrade, Faculty of Forestry, Kneza Višeslava 1, 11000 Belgrade, Republic of Serbia.

In this paper heavy metal contents in *Vacciniuim* species and soils from several localities in Serbia are presented. From literature it is know that some species from *Vaccinium* genus are tolerant of high concentrations of heavy metals in the soil and it is concerned that they are hyperaccumulators of some heavy metals. This ability to inhabit soils with high concentrations of these metals makes some *Vaccinium* species very favorable to use in certain phyto-remediation and revegetation programs.

We examined the zinc (Zn), lead (Pb), cadmium (Cd), nickel (Ni) and chromium (Cr) contents in vegetative parts of *V. myrtillus*, *V. uliginosum* and *V. vitis-idaea* from unpolluted soils. Plant material was collected from several parts in Serbia: Kopaonik Mt., Divčibare, Kamena Gora, Vlasinska visoravan and Stara planina Mt. For the analyses of heavy metal contents, the vegetative parts of plants were air-dried at room temperature and smashed. Soil samples were, also air-dried at 30°C. The heavy metal contents in soil and plant material were measured using method of Atomic Absorption Spectrophotometry (AAS).

Measured heavy metal concentrations in the soil were within the natural concentrations, except in the case of chromium and nickel in the soil of Divčibare. In the plants, the highest concentration of Pb, Ni and Cr are measured in vegetative organs of *V. myrtillus* from Divčibare. Also, measured concentracion of Pb, Ni and Cr are high in vegetative parts of *V. uliginosum*. The highest concentration of Zn and Cd are measured in vegetative parts of *V. uliginosum*. At the localities where all three species were collected, the highest concentrations of heavy metals are measured in vegetative parts of *V. uliginosum*.

Keywords: *Vaccinium* species, vegetative parts, soil, heavy metal, phytoremediation.

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

615.322:582(048)

635.7(048)

633.8(048)

CONFERENCE on Medicinal and Aromatic Plants
of Southeast European Countries (7 ; 2012 ;
Subotica)

Book of Abstracts / 7th CMAPSEEC -
Conference on Medicinal and Aromatic Plants of Southeast European Countries,
27th-31st May, 2012. Subotica. ; [editor in chief Tatjana Lj. Marković].
- Belgrade : Institute for Medicinal Plants Research "Dr Josif Pančić" : Association
for Medicinal and Aromatic Plants of Southeast European Countries,
2012 (Belgrade : Ton Plus). - XIV,
212 str. ; 30 cm

Tiraž 300. - Registar.

ISBN 978-86-83141-15-9 (IMPRDJP)

1. Institute for Medicinal Plants Research "Dr Josif Pančić" (Beograd)

a) Лековите биљке - Апстракти b) Ароматичне биљке - Апстракти

COBISS.SR-ID 190891532