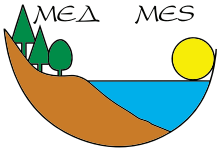

Macedonian Ecological Society

5th CONGRESS OF ECOLOGISTS OF THE REPUBLIC OF MACEDONIA WITH INTERNATIONAL PARTICIPATION

ABSTRACT BOOK

Ohrid, Macedonia 19th - 22nd October 2016

Издавач:**Македонско еколошко друштво**
Институт за биологија
Природно-математички факултет - Скопје
П. фах 162, 1000 Скопје
Цитирање:
Книга на апстракти, V Конгрес на екологите на Македонија со меѓународно учество. Охрид, 19-22.10.2016. Македонско еколошко друштво, Скопје, 2016

Publisher: **Macedonian Ecological Society**
Institute of Biology
Faculty of Natural Sciences
P.O. Box 162, 1000 Skopje, Macedonia
Citation:
Abstract book, V Congress of Ecologists of the Republic of Macedonia with International Participation. Ohrid, 19-22.10.2016. Macedonian Ecological Society, Skopje, 2016

CIP - Каталогизација во публикација
Национална и универзитетска библиотека "Св. Климент Охридски", Скопје

502/504(062)(048.3)

CONGRESS of ecologists of the Republic of Macedonia with international participation (5 ; 2016 ; Ohrid)
Abstract book / 5th Congress of ecologists of the Republic of Macedonia with international participation, Ohrid, Macedonia 19th - 22nd October 2016 = Книга на апстракти / [V Конгрес на екологите на Македонија со меѓународно учество. Охрид, 19.-22.10.2016]. - Скопје : Македонско еколошко друштво = Skopje : Macedonian Ecological Society, 2016. - 213 стр. ; 25 см

Текст напоредно на мак. и англ. јазик

ISBN 978-9989-648-36-6

I. Конгрес на екологите на Македонија со меѓународно учество (5 ; 2016 ; Охрид) види Congress of ecologists of the Republic of Macedonia with international participation (5 ; 2016 ; Ohrid)
а) Екологија - Собири - Апстракти
COBISS.MK-ID 101812746

Scientific and Editorial Committee

Chair: Ljupcho Melovski, Macedonia

Aleksandar Trendafilov, Macedonia
Andraž Čarni, Slovenia
Antun Alegro, Croatia
Blagoja Markoski, Macedonia
Damijan Denac, Slovenia
Diana Zlatanova, Bulgaria
Dmitar Lakušić, Serbia
Drago Kompan, Slovenia
Duško Mukaetov, Macedonia
Goran Anačkov, Serbia
Hasan Huseyin Dogan, Turkey
Ivaylo Dedov, Bulgaria
Ljiljana Tomović, Serbia
Lucija Šerić Jelaška, Croatia
Mariana Lyubenova, Bulgaria
Mitko Karadelev, Macedonia
Nadja Ognjanova-Rumenova, Bulgaria
Nexhbedin Beadini, Macedonia
Nikolay Simov, Bulgaria
Robert Šajn, Slovenia
Senka Barudanović, Bosnia and Hercegovina
Spase Shumka, Albania
Trajče Stafilov, Macedonia
Viktor Popov, United Kingdom
Vladimir Pešić, Montenegro
Vlado Matevski, Macedonia
Zlatko Levkov, Macedonia

Organizing Committee

Chair: Slavco Hristovski

Metodija Velevski
Vladimir Dzabirski
Robertina Brajanoska
Nikolco Velkovski
Todor Anovski
Svetlana Pejovikj
Daniela Jovanovska
Maja Jordanova
Fidanka Trajkova
Srekjko Gjorgievski
Besnik Rexhepi

continuous monitoring of applicable agri-environmental indicators is a key of valuation of the impact of agriculture on environment. Therefore, this paper will give an overview of current data and state of agri-environmental indicators in Republic of Macedonia and accordingly an analysis and evaluation of the sustainable development in the country.

Keywords: agri-environmental indicators, agriculture, environment, agricultural impact, agricultural monitoring

The role of plant biotechnology methods in sustainable agriculture

Liljana Koleva Gudeva, Fidanka Trajkova

Faculty of Agriculture, Goce Delcev University, Stip, Macedonia

Plant biotechnology is set of different scientific approaches and methods that are utilized to improve and modify plants for human and environmental benefit. Plant biotechnology can be used to meet the increasing need for food by improving yields, improving the nutritional quality of crops and recuing the impact on the environment. Plant biotechnology can assist to creation of varieties resistant to frost, droughts and floods, pests and disease, and other abiotic and biotic stresses. Similarly, development of plant biotechnology methods is a reach source of possibilities for creation of new agricultural genotypes, thus enriching the agricultural biodiversity.

This paper presents several *in vitro* methods with successful application results and particular concern for improvement of the biodiversity of horticultural crops, important for Republic of Macedonia. Utilization of the benefits of plant biotechnology will bring "economically sustainable" and "environmentally sound" agricultural production that shall be "socially equal". It is a straight contribution of plant biotechnology to the sustainable agriculture.

Keywords: plant biotechnology, sustainability, agriculture, in vitro methods, horticultural crops

In situ and *Ex situ* gene conservation of domestic animals in the Republic of Macedonia

Vladimir Dzabirski[1], Kocho Porchu[1], Gjoko Bunevski[1], Nikola Pacinoski[2], Dragoslav Kocevski[1], Srekjko Gjorgjievski[1], Goran Trajkovski[1]

[1]*Institute of Animal Biotechnology, Faculty of Agricultural Sciences and Food, University of Ss. "Cyril and Methodius", Skopje, Macedonia*
[2]*Livestock Institute, University of Ss. "Cyril and Methodius", Skopje, Macedonia*

The breed structure, population trend and size of native sheep, goat and cattle breeds in the Republic of Macedonia requires further evaluation, inventarization and characterization in order to preserve and develop proper livestock biodiversity conservation strategies. Conservation of animal