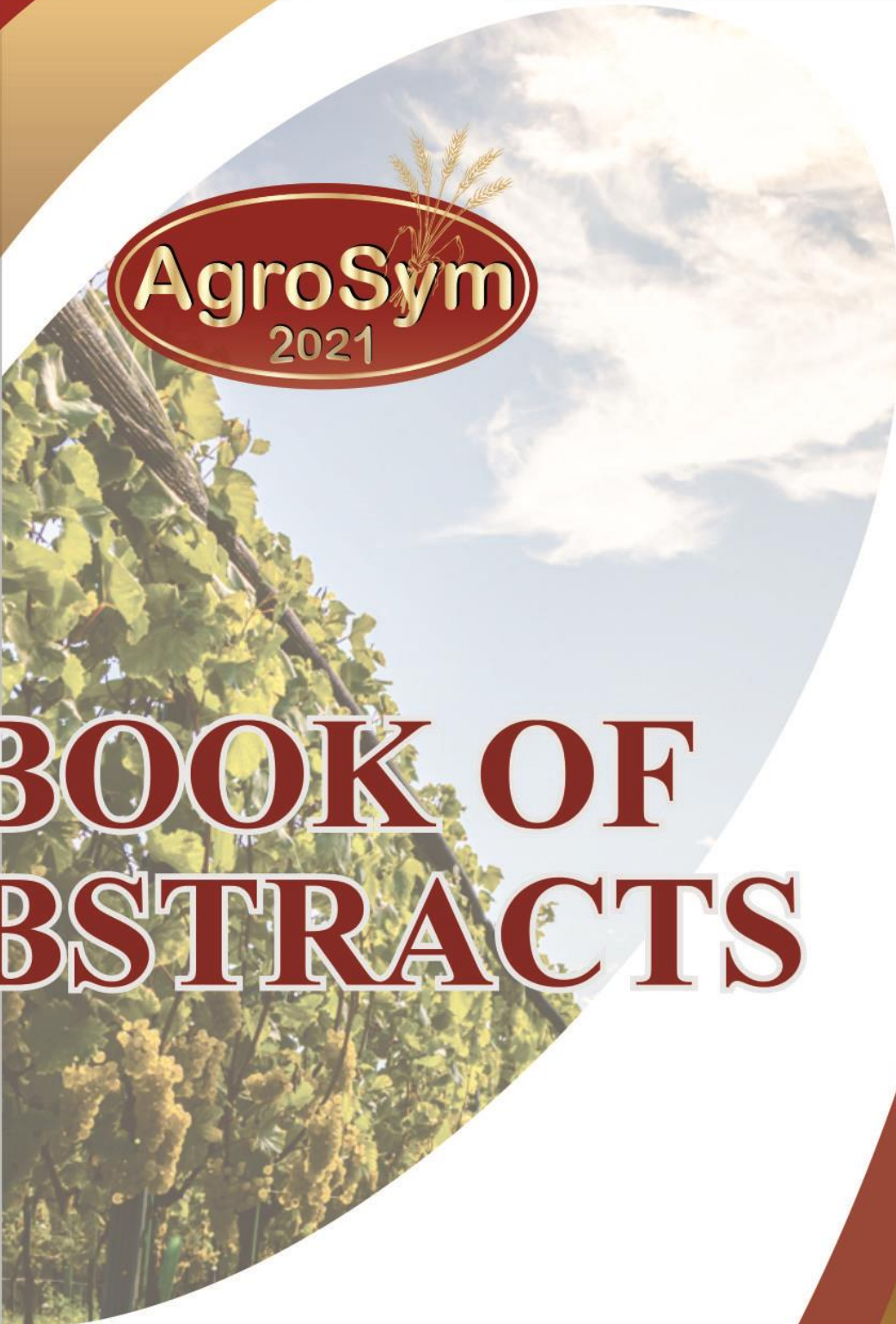




**AgroSym**  
2021



# **BOOK OF ABSTRACTS**

*XII International Scientific  
Agriculture Symposium  
"AGROSYM 2021"  
October 7-10, 2021*



**AGRO** 2021  
**sym**

# **BOOK OF ABSTRACTS**

**XII International Scientific Agriculture Symposium  
“AGROSYM 2021”**



**Jahorina, October 07 - 10, 2021**

## Impressum

XII International Scientific Agriculture Symposium „AGROSYM 2021“

### Book of Abstracts Published by

University of East Sarajevo, Faculty of Agriculture, Republic of Srpska, Bosnia  
University of Belgrade, Faculty of Agriculture, Serbia  
Mediterranean Agronomic Institute of Bari (CIHEAM - IAMB) Italy  
International Society of Environment and Rural Development, Japan  
Balkan Environmental Association (B.EN.A), Greece  
Centre for Development Research, University of Natural Resources and Life Sciences (BOKU),  
Austria  
Perm State Agro-Technological University, Russia  
Voronezh State Agricultural University named after Peter The Great, Russia  
Tokyo University of Agriculture  
Faculty of Agriculture, University of Western Macedonia, Greece  
Faculty of Bioeconomy Development, Vytautas Magnus University, Lithuania  
Enterprise Europe Network (EEN)  
Faculty of Agriculture, University of Akdeniz - Antalya, Turkey  
Selçuk University, Turkey  
University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania  
Slovak University of Agriculture in Nitra, Slovakia  
Ukrainian Institute for Plant Variety Examination, Kyiv, Ukraine  
National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine  
Valahia University of Targoviste, Romania  
National Scientific Center „Institute of Agriculture of NAAS“, Kyiv, Ukraine  
Saint Petersburg State Forest Technical University, Russia  
University of Valencia, Spain  
Faculty of Agriculture, Cairo University, Egypt  
Tarbiat Modares University, Iran  
Chapingo Autonomous University, Mexico  
Department of Agricultural, Food and Environmental Sciences, University of Perugia, Italy  
Higher Institute of Agronomy, Chott Mariem-Sousse, Tunisia  
Watershed Management Society of Iran  
Institute of Animal Science- Kostinbrod, Bulgaria  
Faculty of Economics Brcko, University of East Sarajevo, Bosnia and Herzegovina  
Biotechnical Faculty, University of Montenegro, Montenegro  
Institute of Field and Vegetable Crops, Serbia  
Institute of Lowland Forestry and Environment, Serbia  
Institute for Science Application in Agriculture, Serbia  
Agricultural Institute of Republic of Srpska - Banja Luka, Bosnia and Herzegovina  
Maize Research Institute “Zemun Polje”, Serbia  
Faculty of Agriculture, University of Novi Sad, Serbia  
Institute for Animal Science, Ss. Cyril and Methodius University in Skopje, Macedonia  
Academy of Engineering Sciences of Serbia, Serbia  
Balkan Scientific Association of Agricultural Economics, Serbia  
Institute of Agricultural Economics, Serbia

**Editor in Chief**

Dusan Kovacevic

**Technical editors**

Sinisa Berjan  
Milan Jugovic  
Noureddin Driouech  
Rosanna Quagliariello

**Website:**

<http://agrosym.ues.rs.ba>

CIP - Каталогизација у публикацији

Народна и универзитетска библиотека  
Републике Српске, Бања Лука

631(048.3)(0.034.4)

INTERNATIONAL Scientific Agricultural Symposium "Agrosym 2021" (12 ;  
Jahorina)

Book of Abstracts [Електронски извор] / XII International Scientific  
Agriculture Symposium "Agrosym 2021", Jahorina, October 07 - 10, 2021 ;  
[editor in chief Dušan Kovačević]. - East Sarajevo = Istočno Sarajevo :  
Faculty of Agriculture = Poljoprivredni fakultet, 2021. - 1 електронски  
оптички диск (CD-ROM) : текст, слика ; 12 cm

Системски захтеви: Нису наведени. - Насл. са насл. екрана. - Регистар.

ISBN 978-99976-787-8-2

COBISS.RS-ID 134426625

**XII International Scientific Agricultural Symposium “Agrosym 2021”  
Jahorina, October 07-10, 2021, Bosnia and Herzegovina**

**HONORARY COMMITTEE**

Prof. dr Boris Pasalic, Minister of Agriculture, Water Management and Forestry of Republic of Srpska, Bosnia and Herzegovina  
Mr Srdjan Rajcevic, Minister of Scientific-Technological Development, Higher Education and Information Society of Republic of Srpska, Bosnia and Herzegovina  
Prof. dr Mario T. Tabucanon, President of the International Society of Environment and Rural Development, Japan  
Prof. dr Milan Kulic, Rector of the University of East Sarajevo, Bosnia and Herzegovina  
Prof. dr Dusan Zivkovic, Dean of the Faculty of Agriculture, University of Belgrade, Serbia  
Dr. Maurizio Raeli, Director of the Mediterranean Agronomic Institute of Bari, Italy  
Prof. dr Metin Aksoy, Rector of the Selcuk University, Turkey  
Prof. dr Aleksey Andreev, Rector of the Perm State Agro-Technological University, Russia  
Prof. dr Antanas Maziliauskas, Rector of the Vytautas Magnus University Agriculture Academy, Lithuania  
Prof. dr Alexey Yu. Popov, Rector of the Voronezh State Agricultural University named after Peter The Great, Russia  
Prof. dr Barbara Hinterstoisser, Vice-Rector of the University of Natural Resources and Life Sciences (BOKU), Austria  
Prof. dr Sorin Mihai Cimpeanu, Rector of the University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania  
Doc. Ing. Klaudia Halászová, Rector of the Slovak University of Agriculture in Nitra, Slovakia  
Prof. dr Calin D. Oros, Rector of the Valahia University of Targoviste, Romania  
Prof. Dr Katerina Melfou, Dean of the Faculty of Agriculture, University of Western Macedonia, Greece  
Prof. dr Amr Ahmed Mostafa, Dean of the Faculty of Agriculture, Cairo University, Egypt  
Prof. dr José Sergio Barrales Domínguez, Rector of the Chapingo Autonomous University, Mexico  
Prof. dr Davut Karayel, Dean of Faculty of Agriculture, University of Akdeniz - Antalya, Turkey  
Prof. Dr EGUCHI Fumio, Rector of the Tokyo University of Agriculture, Japan  
Prof. Dr Zeki Bayramoğlu, Dean of Faculty of Agriculture, University of Selçuk- Konya, Turkey  
Dr Chokri Thabet, the General Director of the High Agronomic Institute of Chott Mariem, Sousse, Tunisia  
Prof. dr Ivan Yanchev, Director of the Institute of Animal Science- Kostinbrod, Bulgaria  
Prof. dr Seyed Hamidreza Sadeghi, Professor at Tarbiat Modares University and the President of the Watershed Management Society of Iran, Iran  
Prof. dr Francesco Tei, Director of the Department of Agricultural, Food and Environmental Sciences, University of Perugia, Italy  
Prof. dr Viktor Kaminskyi, Director of National Scientific Center „Institute of Agriculture of NAAS“, Kyiv, Ukraine  
Prof. dr Mirza Dautbasic, Dean of the Faculty of Forestry, University of Sarajevo, Bosnia and Herzegovina  
Prof. dr Bozidarka Markovic, Dean of the Biotechnical Faculty, University of Podgorica, Montenegro  
Prof. dr Rade Jovanovic, Director of the Institute for Science Application in Agriculture, Serbia  
Prof. dr Lazar Radovanovic, Dean of the Faculty of Economics Brcko, University of East Sarajevo, Bosnia and Herzegovina  
Prof. dr Vojislav Trkulja, Director of Agricultural Institute of Republic of Srpska - Banja Luka, Bosnia and Herzegovina  
Dr. Branka Kresovic, Director of the Maize Research Institute “Zemun Polje”, Serbia  
Dr Svetlana Balesevic-Tubic, Director of the Institute of Field and Vegetable Crops, Serbia  
Prof. dr Nedeljko Tica, Dean of the Faculty of Agriculture, University of Novi Sad, Serbia  
Prof. dr Rodne Nastova, Director of the Institute for Animal Science, Skoplje, Macedonia  
Prof. dr Sasa Orlovic, Director of the Institute of Lowland Forestry and Environment, Serbia  
Prof. dr Jonel Subic, Director of the Institute of Agricultural Economics, Serbia  
Prof. dr Branko Kovacevic, President of the Academy of Engineering Sciences of Serbia, Serbia  
Prof. dr Radovan Pejanovic, President of Balkan Scientific Association of Agricultural Economics, Serbia

**SCIENTIFIC COMMITTEE**

Chairman: Academician Prof. dr Dusan Kovacevic, Faculty of Agriculture, University of Belgrade, Serbia  
Prof. dr Machito Mihara, Tokyo University of Agriculture, Japan  
Prof. dr John Brayden, Norwegian Agricultural Economics Research Institute (NILF), Norway  
Prof. dr Steve Quarie, Visiting Professor, School of Biology, Newcastle University, United Kingdom  
Prof. dr Andreas Melcher, CDR, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria  
Prof. dr Dieter Trautz, University of Applied Science, Germany  
Prof. dr Sergei Eliseev, Vice-Rector for Research and Innovations, Perm State Agro-Technological University, Russia  
Prof. dr Dani Shtienberg, full professor, Department of Plant pathology and Weed Research, ARO, the Volcani Center, Bet Dagan, Israel

Prof. dr William Meyers, Howard Cowden Professor of Agricultural and Applied Economics, University of Missouri, USA

Prof. dr Markus Schermer, Department of Sociology, University of Innsbruck, Austria

Academician Prof. dr Novo Przulj, Faculty of Agriculture, University of Banjaluka, Bosnia and Herzegovina

Prof. dr Thomas G. Johnson, University of Missouri – Columbia, USA

Prof. dr Fokion Papathanasiou, School of Agricultural Sciences, University of Western Macedonia, Greece

Prof. dr Sabahudin Bajramovic, Faculty of Agriculture and Food Sciences, University of Sarajevo, Bosnia and Herzegovina

Prof. dr Hiromu Okazawa, Faculty of Regional Environment Science, Tokyo University of Agriculture, Japan

Prof. dr Tatiana Sivkova, Faculty for Veterinarian Medicine and Zootechny, Perm State Agro-Technological University, Russia

Prof. dr Aleksej Lukin, Voronezh State Agricultural University named after Peter The Great, Russia

Prof. dr Matteo Vittuari, Faculty of Agriculture, University of Bologna, Italy

Prof. dr Seyed Mohsen Hosseini, Faculty of Natural Resources, Tarbiat Modares University, Iran

Prof. dr Ardian Maci, Faculty of Agriculture and Environment, Agricultural University of Tirana, Albania

Prof. dr Regucivilla A. Pobar, Bohol Island State University, Philippines

Prof. dr Sudheer Kundukulangara Pulissery, Kerala Agricultural University, India

Prof. dr EPN Udayakumara, Faculty of Applied Sciences, Sabaragamuwa University, Sri Lanka

Prof. dr Vladimir Smutný, full professor, Mendel University, Faculty of agronomy, Czech Republic

Prof. dr Franc Bavec, full professor, Faculty of Agriculture and Life Sciences, Maribor, Slovenia

Prof. dr Jan Moudrý, full professor, Faculty of Agriculture, South Bohemia University, Czech Republic

Prof. dr Stefan Tyr, full professor, Faculty of Agro-biology and Food Resources, Slovakia

Prof. dr Natalija Bogdanov, Faculty of Agriculture, University of Belgrade, Serbia

Prof. dr Richard Barichello, Faculty of Land and Food Systems, University of British Columbia, Canada

Prof. dr Francesco Porcelli, University of Bari Aldo Moro, Italy

Prof. dr Vasilije Isajev, Faculty of Forestry, University of Belgrade, Serbia

Prof. dr Elazar Fallik, Agricultural Research Organization (ARO), Volcani, Israel

Prof. dr Junaid Alam Memon, Pakistan Institute of Development Economics, Pakistan

Prof. dr. Jorge Batlle-Sales, Department of Biology, University of Valencia, Spain

Prof. dr Pandi Zdruli, Land and Water Resources Department; IAMB, Italy

Prof. dr Mladen Todorovic, Land and Water Resources Department; IAMB, Italy

Dr. Hamid El Bilali, Mediterranean Agronomic Institute of Bari, Italy

Prof. dr Maksym Melnychuk, National Academy of Agricultural Science of Ukraine, Ukraine

Prof. dr Borys Sorochnytskyi, Ukrainian Institute for Plant Variety Examination, Kyiv, Ukraine

Dr. Lorenz Probst, CDR, University of Natural Resources and Life Sciences (BOKU), Vienna, Austria

Prof. dr Mohsen Boubaker, High Institute of Agronomy of Chott Meriem, Sousse, Tunisia

Dr. Nouredin Driouech, Coordinator of MAIB Alumni Network (FTN), Mediterranean Agronomic Institute of Bari, Italy

Prof. dr Ion Viorel, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania

Prof. dr. Chuleemas Boonthai Iwai, Faculty of Agriculture, Khon Kaen University, Thailand

Prof. dr Wathuge T.P.S.K. Senarath, Department of Botany, University of Sri Jayewardenepura, Colombo, Sri Lanka

Dr. Hamada Abdelrahman, Soil Science Dept., Faculty of Agriculture, Cairo University, Egypt

Prof. dr Maya Ignatova, Agricultural Academy – Sofia, Bulgaria

Prof. dr Ioannis N. Xynias, School of Agricultural Technology & Food Technology and Nutrition, Western Macedonia University of Applied Sciences, Greece

PhD ing. Artur Rutkiewicz, Department of Forest Protection, Forest Research Institute - IBL, Poland

Prof. dr Mohammad Sadegh Allahyari, Islamic Azad University, Rasht Branch, Iran

Dr. Lalita Siri wattananon, Faculty of Agricultural Technology, Rajamangala University of Technology Thanyaburi (RMUTT), Thailand

Prof. dr Konstantin Korlyakov, Perm Agricultural Research Institute, Russia

Dr. Mohammad Farooque Hassan, Shaheed Benazir Bhutto University of Veterinary & Animal Sciences Sakrand, Sindh, Pakistan

Dr. Larysa Prysiazniuk, Ukrainian Institute for Plant Variety Examination, Kyiv, Ukraine

Prof. dr Oksana Kliachenko, National University of Life and Environmental Science of Ukraine, Ukraine

Prof. dr Ivan Simunic, Department of amelioration, Faculty of agriculture, University of Zagreb, Croatia

Dr. Abid Hussain, International Centre for Integrated Mountain Development (ICIMOD), Nepal

Dr. Amrita Ghatak, Gujarat Institute of Development Research (GIDR), India

Prof. dr Naser Sabaghnia, University of Maragheh, Iran

Dr. Karol Wajszczuk, Poznan University of Life Sciences, Poland

Prof. dr Penka Moneva, Institute of Animal Science - Kostinbrod, Bulgaria

Prof. dr Mostafa K. Nassar, Animal husbandry Dept., Faculty of Agriculture, Cairo University, Egypt

Prof. dr Márta Birkás, full professor, St. Istvan University, Godollo - Hungary

Prof. dr Andrzej Kowalski, Director of the Institute for Agricultural and Food Economy, Warszawa-Poland

Prof. dr Yalcin Kaya, The Director of the Plant Breeding Research Center, University of Trakya, Turkey

Prof. dr Sanja Radonjic, Biotechnical Faculty, University of Montenegro, Montenegro

Prof. dr Ionela Dobrin, Department for Plant Protection, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania

Prof. dr Inocencio Buot Jr., Institute of Biological Sciences, College of Arts and Sciences, University of the Philippines Los Banos, Philippines

Prof. dr Monica Paula Marin, Department for Animal Husbandry, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania

Prof. dr Nedeljka Nikolova, Institute for Animal Science, Ss. Cyril and Methodius University in Skopje, Republic of Macedonia

Prof. dr Mohammad Al-Mamun, Department of Animal Nutrition, Bangladesh Agricultural University, Bangladesh

Prof. dr Anucha Wittayakorn-Puripunpinyoo, School of Agriculture and Co-operatives, Sukhothai Thammathirat Open University, Nonthaburi, Thailand

Dr. Redouane Choukr-Allah, International Center for Biosaline Agriculture (ICBA), United Arab Emirates

Prof. dr Ignacio J. Díaz-Maroto, High School Polytechnic, University of Santiago de Compostela, Spain

Prof. dr Nidal Shaban, University of Forestry Sofia, Bulgaria

Prof. dr Mehdi Shafaghati, Faculty of Geography, Tarbiat Moalem (kharazmi) University, Iran

Prof. dr Youssif Sassine, Lebanese University Beirut, Lebanon

Prof. dr Cafer Topaloglu, Faculty of Tourism, Mugla Sitki Kocman University, Turkey

Prof. dr Seyed Hamidreza Sadeghi, Faculty of Natural Resources, Tarbiat Modares University, Iran

Prof. dr Mohsen Mohseni Saravi, University of Teheran and Member of WMSI Management Board, Iran

Prof. dr Branislav Draskovic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina

Prof. dr Mahmood Arabkhedri, Soil Conservation and Watershed Management Research Institute and Member of WMSI Management Board, Iran

Prof. dr Ataollah Kavian, Sari Agricultural Science and Natural Resources University and Member of WMSI Management Board, Iran

Prof. dr Tugay Ayasan, Department of Organic Farming Business Management, Osmaniye, Applied Science School of Kadirli, Osmaniye Korkut Ata University, Turkey

Prof. dr Sakine Özpınar, Department of Farm Machinery and Technologies Engineering, Faculty of Agriculture, Çanakkale Onsekiz Mart University, Çanakkale, Turkey

Prof. dr Sherein Saeide Abdelgayed, Faculty of Veterinary Medicine, Cairo University, Cairo, Egypt

Prof. dr Zohreh Mashak, Islamic Azad University, Karaj Branch, Iran

Dr. Khalid Azim, National Institute of Agriculture Research, Morocco

Dr. Mario Licata, Department of Agricultural, Food and Forest Sciences, University of Palermo, Italy

Prof. dr Srdjan Lalic, University of East Sarajevo, Bosnia and Herzegovina

Prof. dr Zeljko Vasko, Faculty of Agriculture, University of Banja Luka, Bosnia and Herzegovina

Dr. Edouard Musabanganji, School of Economics/CBE, University of Rwanda, Rwanda

Prof. dr Kubilay Baştaş, Department of Plant Protection, Faculty of Agriculture, Selçuk University, Turkey

Dr. Branka Kresovic, Director of the Maize Research Institute “Zemun Polje”, Serbia

Dr. Nenad Delic, Maize Research Institute “Zemun Polje”, Serbia

Dr. Milan Stevanovic, Maize Research Institute “Zemun Polje”, Serbia

Dr. Svetlana Balesevic-Tubic, Institute of Field and Vegetable Crops Novi Sad, Serbia

Dr. Ana Marjanovic Jeromela, Institute of Field and Vegetable Crops Novi Sad, Serbia

Prof. dr Tatjana Krajisnik, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina

Prof. dr Aleksandra Govedarica-Lucic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina

Prof. dr Desimir Knezevic, University of Pristina, Faculty of Agriculture, Kosovska Mitrovica - Lesak, Kosovo i Metohija, Serbia

Dr. Snezana Mladenovic-Drinic, Maize Research Institute “Zemun Polje”, Serbia

Prof. dr Nebojsa Momirovic, Faculty of Agriculture, University of Belgrade, Serbia

Prof. dr Osman Mujezinovic, Faculty of Forestry, University of Sarajevo, Bosnia and Herzegovina

Prof. dr Dalibor Ballian, Faculty of Forestry, University of Sarajevo, Bosnia and Herzegovina

Prof. dr Velibor Spalevic, Faculty of Philosophy, Geography, University of Montenegro

Prof. dr Zoran Jovovic, Biotechnical Faculty, University of Montenegro, Montenegro

Prof. dr Danijel Jug, Faculty of Agriculture, University of Osijek, Croatia

Prof. dr Milan Markovic, Biotechnical Faculty, University of Montenegro, Montenegro

Prof. dr Zeljko Dolijanovic, Faculty of Agriculture, University of Belgrade, Serbia

Dr Dejan Stojanovic, Institute of Lowland Forestry and Environment, Serbia

Dr Dobrivoj Poštić, Institute for plant protection and environment, Belgrade, Serbia

Dr Srdjan Stojnic, Institute of Lowland Forestry and Environment, Serbia

Dunja Demirović Bajrami, Research Associate, Geographical Institute “Jovan Cvijić,” Serbian Academy of Sciences and Arts, Belgrade, Serbia

## ORGANIZING COMMITTEE

Chairperson: Prof. dr Vesna Milic, Dean of the Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
Dr Marko Gutalj, Vice rector of the University of East Sarajevo, Bosnia and Herzegovina  
Dr Jelena Kronic, Vice rector of the University of East Sarajevo, Bosnia and Herzegovina  
Dr. Maroun El Moujabber, Mediterranean Agronomic Institute of Bari, Italy  
Mrs. Rosanna Quagliariello, Mediterranean Agronomic Institute of Bari, Italy  
Prof. dr Aleksandra Despotovic, Biotechnical Faculty Podgorica, University of Montenegro, Montenegro  
Dr. Nouredin Driouech, Coordinator of MAIB Alumni Network (FTN), Mediterranean Agronomic Institute of Bari, Italy  
Dr Milic Curovic, The journal "Agriculture and Forestry", Biotechnical Faculty Podgorica, University of Montenegro, Montenegro  
Dr. Tatiana Lysak, International Relations Office, Voronezh State Agricultural University named after Peter The Great, Russia  
Dr. Oksana Fotina, International Relations Center, Perm State Agro-Technological University, Russia  
Prof. dr Fokion Papathanasiou, School of Agricultural Sciences, University of Western Macedonia, Greece  
Dr Ana Marjanović Jeromela, Institute of Field and Vegetable Crops, Serbia  
Dr. Anastasija Novikova, Faculty of Bioeconomy Development, Vytautas Magnus University, Lithuania  
Prof. dr Engr. Teodora Popova, Institute of Animal Science - Kostinbrod, Bulgaria  
Prof. dr Mehmet Musa Ozcan, Faculty of Agriculture, Selçuk University, Turkey  
Dr. Abdulvahed Khaledi Darvishan, Faculty of Natural Resources, Tarbiat Modares University, Iran  
Prof. dr Nikola Pacinovski, Institute for Animal Science, Ss. Cyril and Methodius University in Skopje, N. Macedonia  
MSc. Erasmo Velázquez Cigarroa, Department of Rural Sociology, Chapingo Autonomous University, Mexico  
Dr. Ecaterina Stefan, University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania  
Dr. Jeeranuch Sakkhamduang, The International Society of Environmental and Rural Development, Japan  
Dr. Raoudha Khanfir Ben Jenana, High Institute of Agronomy of Chott Meriem, Sousse, Tunisia  
Dr. Hamada Abdelrahman, Soil Science Dept., Faculty of Agriculture, Cairo University, Egypt  
Dr. Dragana Sunjka, Faculty of Agriculture, University of Novi Sad, Serbia  
MSc. Vedran Tomic, Institute for Science Application in Agriculture, Serbia  
Dr. Milan Stevanovic, Maize Research Institute "Zemun Polje", Serbia  
Dr. Andrej Pilipovic, Institute of Lowland Forestry and Environment, Serbia  
Dr. Sc. Morteza Behzadfar, Tarbiat Modares University, Tehran, Iran  
Dr. Larysa Prysiazhniuk, Ukrainian Institute for Plant Variety Examination, Kyiv, Ukraine  
Dr. Diana Bilić-Šobot, Faculty of Agriculture, University of Niš, Serbia  
Doc. dr Sead Ivojevic, Faculty of Forestry, University of Sarajevo, Bosnia and Herzegovina  
Dr. Nenad Markovic, Enterprise E. N. (EEN) Coordinator, University of East Sarajevo, Bosnia and Herzegovina  
Mrs Branislavka Boroja, Agricultural Institute of Republic of Srpska - Banja Luka, Bosnia and Herzegovina  
MSc. Milan Jugovic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
Prof. dr Sinisa Berjan, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
MSc. Milena Stankovic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
Dr. Stefan Stjepanovic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
Doc. dr Dejana Stanic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
MSc. Stefan Bojic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
MSc. Tanja Jakisic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
MSc. Tijana Banjanin, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
MSc. Boban Miletic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
MSc. Todor Djorem, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina  
Dr. Igor Djurdjic, Faculty of Agriculture, University of East Sarajevo, Bosnia and Herzegovina, General Secretary



## PREFACE

Dear colleagues,

In your hands is the Book of Abstracts of the 12<sup>th</sup> International Scientific Agricultural Symposium "AGROSYM 2021", which I hope you will find useful in your work. As many as 700 contributions have been accepted for the Book of Abstracts. The themes of AGROSYM 2021 cover all branches of agriculture and are divided into seven sessions: 1) Plant production, 2) Plant protection and food safety, 3) Organic agriculture, 4) Environmental protection and natural resources management, 5) Animal husbandry, 6) Rural development and agro-economy, and 7) Forestry and agroforestry.

The multi-functionality of agriculture (viz. crop production, animal production and fisheries) and the central role it plays in food production, food security, rural development, bio-economy (e.g. production of fibres and raw materials for industries) and green economy (e.g. production of biofuels) determine its importance in all countries; especially nowadays, with the second year of the COVID-19 pandemic.

Many scholars and practitioners argue that technology will increase production and feed more people while reducing the variability as well as the environmental impacts of agricultural production. Technology has been particularly important for improving production in non-tree crops such as maize, rice, soybean, wheat and cotton. Because trees have longer cycles, they take longer to improve through traditional breeding programs. New techniques of plant breeding can improve productivity further, but there is a lively academic debate about their pros and cons.

While the focus has been in the past on the production side (cf. productivity, efficiency), more and more attention is nowadays paid to the consumption side as well as the intermediate stages (e.g. processing, distribution) of the food chain thus moving towards a 'farm to fork' approach. Globally, consumers are sending clearer signals than ever before about what they want on their tables i.e. higher quality as well as healthier, safer, and tastier products. Therefore, most companies in the food industry are currently exploring different ways to ensure that they have more control over the production processes for agricultural commodities as well as final products quality. Changes in investment strategy also have the potential to reduce the environmental and social costs of agriculture. It is now apparent to most investors that companies that pay more attention to sustainability and social responsibility, even with the same financial rating, will have better returns both in the short term and over time.

Agri-food systems have been central in the global debate on sustainable development and the achievement of the Sustainable Development Goals (SDGs) as shown by the recent United Nations' Food Systems Summit held in September 2021 in New York. Indeed, agri-food systems are at the center of various global challenges such as climate change, poverty, vulnerability, food insecurity, biodiversity loss, resource scarcity and ecosystem degradation. In this context, one of the goals of the sustainable agriculture movement is to create farming systems that mitigate or eliminate environmental harms associated with industrial agriculture.

Many thanks to all the authors, reviewers and colleagues for their help in editing the Book of Abstracts. Special thanks go to all co-organizers and partners for their unselfish collaboration and comprehensive support.

East Sarajevo, 07 October 2021

Prof. Dušan Kovačević, PhD

Editor in Chief, President of the Scientific Committee of AGROSYM 2021



## CONTENT

<b>KEYNOTE PAPERS .....</b>	<b>75</b>
<b>REDEFINING THE COMPETITIVE IDEOTYPE OF A MODERN CROP VARIETY: AGRONOMY AND BREEDING PERSPECTIVES</b>	
Ioannis TOKATLIDIS .....	76
<b>FACTORS DRIVING RECENT AND PROJECTED DEVELOPMENTS IN WORLD AGRICULTURAL MARKETS</b>	
Patrick WESTHOFF .....	77
<b>CUTTING-EDGE CROP BREEDING WITH CRISPR-CAS GENOME EDITING TECHNOLOGIES</b>	
Yiping QI .....	78
<b>1. PLANT PRODUCTION .....</b>	<b>79</b>
<b>EFFECT OF WATER STRESS ON THE BEHAVIOR OF SIX DURUM WHEAT GENOTYPES IN A SEMI-ARID REGION OF WESTERN ALGERIA</b>	
Fetati AICHA.....	80
<b>PHYSICO-CHEMICALSTUDY AND ANTIOXIDANTACTIVITY OF FIVE ALGERIAN HONEY SAMPLES</b>	
Nabila BRAHMI .....	81
<b>GENETIC STRUCTURE OF BARLEY (HORDUM VULGARE L.): ACCESSION COLLECTIONS FROM ALGERIA</b>	
Warda TAIBI, Fatima HENKRAR, Sripada MAHABALA UDUPA, Suheil BECHIR SEMIR GAOUAR.....	82
<b>COMPARATIVE STUDY OF KERNEL TRAITS AMONG THE DIFFERENT WHEAT- ALIEN AMPHIPLOIDS IN CONDITIONS OF ABSHERON PENINSULA</b>	
Rahim RAHIMOV, Mehraj ABBASOV, Aybeniz ALIYEVA, Sabina MEHDIYEVA .....	83
<b>BIOSTIMULANTS FOR ENHANCING PLANT ABIOTIC STRESS TOLERANCE</b>	
Mirza HASANUZZAMAN .....	84
<b>ENHANCEMENT OF THE CUCUMBER SEEDLING QUALITY THROUGH PRIMING WITH NaCl</b>	
Farjana PARVIN, Homayra AKHTER, Shahnewaz SHARIF, Shamim REZA, Debasish PAUL, Shreef MAHMOOD.....	85
<b>THE INFLUENCE OF FERTILIZATION WITH PYROPHYLLITE ON VEGETATIVE GROWTH OF WHITE HEAD CABBAGE</b>	
Sanid PAŠIĆ, Aleksandra GOVEDARICA-LUČIĆ, Goran PERKOVIĆ.....	86

<b>FUNCTIONAL FOOD - PRODUCTS FROM TOMATO WITH LYCOPENE IN PREVENTION OF CARDIOVASCULAR DISEASES</b>	
Hanadija OMANOVIC, Amna BIJEDIC, Deniz EKINCI.....	87
<b>INFLUENCE OF DIFFERENT FERTILIZATION MODELS ON THE MORPHOLOGY OF GALA SHNIGA APPLE LEAF (Malus domestica L.)</b>	
Dževad LAVIC .....	88
<b>THE EFFECTS OF MINERAL FEEDING AND LOCATION ON SEED QUALITY OF SEVERAL SORTS OF FORAGE</b>	
Igor ĐURĐIĆ, Vesna MILIĆ, Branka GOVEDARICA, Željko LAKIĆ .....	89
<b>THE EFFECT OF POLYMER AND LOCATION ON SOME MORPHOLOGICAL CHARACTERISTICS OF POTATO</b>	
Vesna MILIĆ, Branka GOVEDARICA, Igor ĐURĐIĆ, Anđelka POPADIĆ, Igor MILUNOVIĆ...	90
<b>CHEMICAL COMPOSITION OF THE FRUIT OF AUTOCHTHONOUS CULTIVARS OF APPLE FROM SARAJEVO AREA (BOSNIA AND HERZEGOVINA)</b>	
Nedim BADŽAK, Zlatka ALIĆ–DŽANOVIĆ, Mirjana RADOVIĆ, Mirko KULINA, Jasmina ALIMAN.....	91
<b>INFLUENCE OF THE SIZE OF VEGETATION SPACE ON THE QUALITY OF TOMATO SEEDLINGS</b>	
Vida TODOROVIĆ, Svjetlana ZELJKOVIĆ, Nikolina ĐEKIĆ, Dragan ŠVRAKA.....	92
<b>IMPORTANCE OF BARLEY STEM RESERVES IN STRESS TOLERANCE</b>	
Novo PRŽULJ.....	93
<b>VASE LIFE OF CUT FLOWERS USING DIFFERENT VASE SOLUTION</b>	
Svjetlana ZELJKOVIĆ, Milica PAŠALIĆ, Boris PAŠALIĆ, Emina MLADENOVIĆ .....	94
<b>GENETIC PARAMETERS AND SELECTION IN ELEPHANT GRASS FOR PRODUCTION AND QUALITY OF BIOMASS BY MIXED-MODELS</b>	
Rogério FIGUEIREDO DAHER, Raiane MARIANI SANTOS, Ana Késia FARIA VIDAL, Wanessa FRANSCESCONI STIDA, Alexandre GOMES DE SOUZA, Rafael SOUZA FREITAS, Maxwel RODRIGUES NASCIMENTO, Josefa GRASIELA SILVA SANTANA, Cleudiane LOPES LEITE, Moisés AMBRÓSIO, Antônio VANDER PEREIRA.....	95
<b>ENERGY FOR DYNAMIC TEARING OF GYNOPHORS OF BULGARIAN PEANUT VARIETIES</b>	
Nayden NAYDENOV, Stoyan ISHPEKOV .....	96
<b>COMPARATIVE STUDY OF LETTUCE CULTIVARS UNDER OPEN FIELD PRODUCTION</b>	
Shaban NIDAL, I. MITOVA, M. RIZAKOV .....	97
<b>PLANT GENETIC RESOURCES IN BULGARIA – CONSERVATION AND UTILIZATION</b>	
Katya UZUNDZHALIEVA, Mariya SABEVA, Siyka ANGELOVA .....	98

<b>EFFECTS OF GAMMA-IRRADIATION ON OXIDATIVE STABILITY AND ANTIOXIDANT ACTIVITY OF WALNUTS</b>	
Sabina TANEVA, Dessislava TENEVA, Adriana KAZAKOVA, Iskra TOTZEVA, Zhanina PETKOVA, Mariana NACHEVA, Petko DENEV, Svetlana MOMCHILOVA .....	99
<b>INFLUENCE OF DIFFERENT ROOTSTOCKS ON THE CONTENT OF BIOLOGICALLY ACTIVE COMPOUNDS IN PLUMS AND PEACHES</b>	
Victoria IVANOVA, Boryana TRUSHEVA, Sava TABAKOV, Antoaneta TREDAFILOVA....	100
<b>INFLUENCE OF INTERCROPPING SWEET SORGHUM WITH CLIMBING BEAN ON FORAGE YIELD AND QUALITY</b>	
Darko UHER, Zlatko SVEČNJAK, Zvonko PACANOSKI, Dubravka DUJMOVIĆ-PURGAR, Martina KOVAČEVIĆ, Ivan HORVATIĆ .....	101
<b>EFFECT OF FOLIAR SPRAY OF AMMONIUM NITRATE AND IRRIGATION TIME ON VEGETATIVE GROWTH, FRUIT SET, YIELD AND FRUIT QUALITY OF "EWAIS" MANGO TREES</b>	
M. M. M. ABD EL-MIGEED, E. ABD EL-RAZEK; Hassan A. M. ALI, N. ABDEL-HAMID .....	102
<b>CO-ADDITION OF POTASSIUM HUMATE AND VINASSE ENHANCES GROWTH AND YIELD IN "WONDERFUL" POMEGRANATE UNDER SANDY SOIL</b>	
Hassan A. M. ALI, Emad ABD EL-RAZEK, Mahmoud M.M. ABD EL-MIGEED, Fatma El-Zahraa M. GOUDA.....	103
<b>EFFECT OF DIFFERENT WEED CONTROL PRACTICES ON YIELD OF SESAME CROP</b>	
Rady, M. O. A.; H. MAHFOUZ; A. EKRAM MEGAWER, F.S. ABD EL-SAMIE.....	104
<b>OPTIMISATION OF THE SUBSTRATE FOR THE CULTIVATION OF OYSTER MUSHROOMS (<i>PLEUROTUS OSTREATUS</i>) USING COFFEE GROUNDS AND BY-PRODUCT FROM BREWERIES</b>	
M. CRANIER, M. KOCH, E. OGANESSOVA, A. SMITH, T. DE OLIVIERA, Ludovic ANDRES .....	105
<b>SWEET POTATO ROOT SYSTEM UNDER VARIOUS CULTIVATION TECHNIQUES</b>	
Emanuel JAUFMANN, Kurt-Jürgen HÜLSBERGEN, Harald SCHMID .....	106
<b>DEVELOPMENT OF A WEB-BASED FARM-NUTRIENT-MANAGEMENT-SYSTEM: REQUIREMENTS AND MODEL STRUCTURE</b>	
Joseph DONAUER, Marco LUTHARDT, Frank LEßKE, Kurt-Jürgen HÜLSBERGEN .....	107
<b>INFLUENCE OF BLUE AND RED LEDs ON DEVELOPMENT AND NUTRITIVE VALUE OF <i>PERILLA FRUTESCENS</i> (L.) CULTIVATED IN CLIMATE CHAMBERS</b>	
Nikolina GRABOVAC, Michael H. BÖHME .....	108
<b>BREEDING MAIZE FOR ADAPTATION AT A LOW INPUT FARMING SYSTEM</b>	
Chrysanthi PANKOU, Fotakis GEKAS, Fokion PAPATHANASIOU, Foteini PAPADOPOULOU, Athina BIZI, Evaggelia SINAPIDOU, Ioannis TOKATLIDIS .....	109

<b>MANAGEMENT OF INTRA-CULTIVAR VARIATION IN COTTON</b> Chrysanthi PANKOU, Athanasios MAVROMATIS, Aphrodite TSABALLA, Ioannis TOKATLIDIS .....	110
<b>NITROGEN FERTILIZATION'S EFFECT ON THE QUALITY CHARACTERISTICS OF VARIOUS SORGHUM VARIETIES</b> Dimitrios BARTZIALIS, Kyriakos D. GIANNOULIS K.D., Elpiniki SKOUFOGIANNI E., George CHARVALAS, Nikolaos G DANALATOS .....	111
<b>THE EFFECT OF DIRECT USE OF LAKESIDE BIOMASSAS SOIL AMENDMENT ON THE PRODUCTIVITY OF DRY BEAN CROP</b> Fokion PAPATHANASIOU, Anthousa TZOTZI, Irene KOUTSERI, Myrsini MALAKOU, Theodoros PARISIS, Ioannis PAPADOPOULOS.....	112
<b>SELECTION AT ULTRA-LOW DENSITY OF SECOND GENERATION LINES OF BEAN CULTIVARS UNDER WATER STRESS</b> Fokion PAPATHANASIOU, Ioannis MYLONAS, Ilias AVDIKOS, Olga PETIDOU, Elisavet NINOY, Fotini PAPADOPOULOU, Ioannis PAPADOPOULOS .....	113
<b>EVALUATION AND SELECTION OF MAIZE GENOTYPES WITHOUT COMPETITION</b> Fokion PAPATHANASIOU, Chrysanthi PANKOU, Iosif SISTANIS, Michail ORFANOUDAKIS, Evaggelia SINAPIDOU, Ioannis PAPADOPOULOS, Ioannis TOKATLIDIS.....	114
<b>IDENTIFICATION OF POPULATION-NEUTRAL MAIZE HYBRIDS USING PHYSIOLOGICAL TRAITS</b> Fotis GEKAS, Fokion PAPATHANASIOU, Ioannis TOKATLIDIS .....	115
<b>GRAIN QUALITY OF OPEN-POLLINATED MAIZE LINES AND HYBRIDS UNDER DROUGHT</b> Fotis GEKAS, Chrysanthi PANKOU, Fokion PAPATHANASIOU, Foteini PAPADOPOULOU, Iosif SISTANIS, Evaggelia SINAPIDOU, Ioannis TOKATLIDIS .....	116
<b>GRAIN QUALITY OF OPEN-POLLINATED MAIZE LINES AND HYBRIDS UNDER DROUGHT</b> Fotis GEKAS, Chrysanthi PANKOU, Fokion PAPATHANASIOU, Foteini PAPADOPOULOU, Iosif SISTANIS, Evaggelia SINAPIDOU, Ioannis TOKATLIDIS .....	117
<b>SELECTING MAIZE GENOTYPES UNDER TWO INPUT SYSTEMS BASED ON PHYSIOLOGICAL TRAITS AND SEED YIELD</b> Iosif SISTANIS, Chrysanthi PANKOU, Fotakis GEKAS, Foteini PAPADOPOULOU, Ioannis PAPADOPOULOS, Ioannis TOKATLIDIS, Fokion PAPATHANASIOU .....	118
<b>EVALUATION OF GREEK RYE (<i>SECALE CEREALE</i> L.) ACCESSIONS</b> Iosif SISTANIS, Ioannis MYLONAS, Elisavet NINOY, Parthenopi RALLI, Theano LAZARIDOU, Fokion PAPATHANASIOU .....	119

<b>PHOSPHORUS FERTILIZATION EFFECT ON <i>VICIA FABAYIELD</i> AND PROTEIN CONTENT</b>	
Dimitrios BARTZIALIS, Kyriakos D. GIANNOULIS, Elpiniki SKOUFOGIANNI, George CHARVALAS, Nicholaos G. DANALATOS .....	120
<b>COMPARISON OF TWO COMMERCIAL KITS FOR <i>ZEA MAYS</i> ROOT DNA EXTRACTION</b>	
Louloudia KOULYMPPOUDI, George KONTOURIS, Pavlina ALEXANDRIDOU, Nikolaos PARISSIS, Chrysa MITAKIDOU, Athanasios ZAMANIS, Evangelos KARAGEORGOS, Evangelos PANTOULIS, Nikolaos STAMATIS, Anastasios TSAKALAKIS, Konstantina CHARALAMPOUS, Dimitris IOANNOU .....	121
<b>THE EFFECT OF BIOSTIMULANT APPLICATION ON LETTUCE GROWTH PARAMETERS</b>	
Spyridon A. PETROPOULOS, Christina CHASKI.....	122
<b>RESPONSE OF PUMPKIN GENOTYPES TO DROUGHT STRESS AT GERMINATION STAGE</b>	
Spyridon A. PETROPOULOS, Chrysa FOTI, Ourania PAVLI .....	123
<b>GERMINATION PROFILING OF PUMPKIN GENOTYPES UNDER SALINITY STRESS</b>	
Spyridon A. PETROPOULOS, Chrysa FOTI, Ourania PAVLI .....	124
<b>THE EFFECT OF FERTILIZATION REGIME ON <i>SCOLYMUS HISPANICUS</i> PLANT GROWTH</b>	
Spyridon A. PETROPOULOS, Nikolaos POLYZOS, Maria COMPOCHOLI.....	125
<b>SILAGE YIELD AND PROTEIN CONTENT OF FORAGE LEGUMES INTERCROPPING WITH CEREALS IN TWO SPATIAL ARRANGEMENTS</b>	
Konstantinos GENNATOS, Theano B. LAZARIDOU .....	126
<b>EVALUATION OF GREEK BREAD AND DURUM WHEAT CULTIVARS FOR DROUGHT TOLERANCE USING POLYETHYLENE GLYCOL</b>	
Maria KARAGIANNI, Maria MOSCHOU, Theano B. LAZARIDOU .....	127
<b>PEANUT RESPONSE TO PLANTING PATTERN AND ROW SPACING</b>	
Vasileios LIAKOS, Panagiotis VIRLAS, Maria KOKORA, Dimitris KALFOUNTZOS .....	128
<b>COMPARISON COMPOSITION OF LAVENDER AND LAVANDIN VOLATILES CULTIVATED IN KASHMIR HIMALAYAS WHICH HAVE POTENTIAL TO BE VERSATILE INDUSTRIAL CROPS OF THE REGION</b>	
S. A.GANGO, A. R. MALIK, P. ISHTIAK, A. SINGH .....	129
<b>EFFECT OF HUMIC ACID AND FULVIC ACID ON THE YIELD AND SUGAR YIELD OF SUGAR BEET</b>	
Alireza GHAEMI, Rabieh JULIDEH .....	130

**GROWTH PARAMETER RESPONSE OF QUINOA TO NITROGEN FERTILIZER UNDER HIGH SALINITY LEVELS**

Asghar RAHIMI, Raheleh AFSHARMANESH, Seyyed Rasoul SAHHAFI, Masoumeh SALEHI 131

**COMPARISON OF THE EFFECT OF BIO AND NON-BIO-FERTILIZERS ON YIELD AND ESSENTIAL OIL OF *THYMUS VULGARIS* L.**

Farideh GOSHASBI, Mostafa HEIDARI, Seyed Kazem SABBAGH, Hassan MAKARIAN, Seyyed Mohammad taghi TABATABAI ..... 132

**THE GENETIC DIVERSITY AND MOLECULAR MAPPING OF ROOT TRAITS IN DURUM WHEAT**

Ghasemali NAZEMI , Marco MACCAFERRI, Silvio SALVI, Roberto TUBEROSA, Gita DEHGHANI , Sahba NAZEMI ..... 133

**THE EFFECT OF *PSEUDOMONAS SP* AND *SERRATIA MARCESCENS* ON THE ALTERATION OF SEPIOLITE UNDER SALINITY STRESS**

Reyhaneh NEJADASADI, Isa ESFANDIARPOUR-BOROJENI, Mohsen HAMIDPOUR, Peyman ABBASZADEH-DAHAI, Seyed Javad HOSSEINIFARD ..... 134

**FARMERS' VIEWPOINTS REGARDING TRANSPLANTING VEGETABLE SEEDLINGS: THE CASE OF SOUTHWEST IRAN**

Masoumeh FOROUZANI, Gholamreza MAHLAGHA, Masoud BARADARAN ..... 135

**FARMERS' SUBJECTIVE WELL-BEING UNDER DROUGHT CONDITION: A COMPARISON BETWEEN DIFFERENT CULTIVATION SYSTEMS**

Masoumeh FOROUZANI, Ali SALEHNEJAD, Masoud YAZDANPANA, Marzieh KESHAVARZ ..... 136

**EFFECTS OF GAMMA IRRADIATION ON ESSENTIAL OIL OF *SATUREJA HORTENSIS* L.**

Mehdi MOHEBODINI, Neda TARIVERDIZADEH ..... 137

**CHEMICAL ANALYSES OF THE ESSENTIAL OILS AND ANTIOXIDANT ACTIVITY FROM *SATUREJA HORTENSIS* L. ACCESSIONS FROM EUROPE AND ASIA**

Mehdi MOHEBODINI, Roghayeh FATHI..... 138

**GRAPHIC ANALYSIS OF DROUGHT TOLERANCE IN DURUM WHEAT GENOTYPES USING STRESS SELECTION INDICES**

Gohar AFROOZ, Naser SABAGHNIA, Rahmatollah KARIMIZADEH, Fariborz SHEKARI..... 139

**THE EVALUATION OF SEVERAL MINERAL FERTILIZERS' TYPES ON MAIZE TRAITS**

Abbas REZAEI, Mohsen JANMOHAMMADI, Naser SABAGHNIA ..... 140

**INVESTIGATION OF NANO AND BIO FERTILIZERS ON YIELD AND YIELD COMPONENTS OF MAIZE UNDER LIMITED IRRIGATION**

Sirous SADEGHI , Mohsen JANMOHAMMADI, Naser SABAGHNIA..... 141

<b>EFFECT OF COLD PLASMA, SEED COAT SALICYLIC ACID NANO-FORMULATION ON SOME PHYSIOLOGICAL TRAITS OF <i>SALVIA LERIFFOLIA</i> BENTH. SEED</b>	
Seyedeh Mansoureh GHODSIMAAB, Hassan MAKARIAN <sup>1</sup> , Ziba GHASIMI HAGH, Manoochehr GHOLIPOUR <sup>1</sup> .....	142
<b>POMOLOGICAL PROPERTIES OF SOME IRANIAN PLUM (<i>PRUNUS DOMESTICA</i>) CULTIVARS</b>	
Yahya SELAHVARZI, Fatemeh NADALIZADEH, Masoud TAGHIZADEH, Malihe MORSHEDLOO .....	143
<b>THE FIRST RECORD OF ASCOCHYTA BLIGHT ON JASMINE PLANTS (ARABIAN JASMINE) IN MOSUL-IRAQ</b>	
Nadeem AHMED RAMADAN .....	144
<b>EFFECTS OF DIFFERENT AUXIN (IBA) CONCENTRATIONS ON ROOTING OF COMMON LANTANA (<i>LANTANA CAMARA</i>) AND ABELIA (<i>ABELIA X GRANDIFLORA</i>) CUTTINGS.</b>	
Danilo LOCONSOLE, Barbara DE LUCIA, Giuseppe CRISTIANO .....	145
<b>INFLUENCE OF AGRONOMIC TECHNIQUES ON QUANTITATIVE AND QUALITATIVE PRODUCTION OF ESSENTIAL OILS OF SOME OFFICINAL SPECIES</b>	
Davide FARRUGGIA, Mario LICATA, Salvatore LA BELLA, Teresa TUTTOLOMONDO .....	146
<b>CHASING DROUGHT STRESS IN LPA1-1 MAIZE MUTANT: EVALUATION OF THE ROOT SYSTEM ARCHITECTURE AND PHOTOSYNTHETIC PARAMETERS</b>	
Federico COLOMBO, Greta BERTAGNON, Michele PESENTI, Roberto PILU .....	147
<b><i>OPUNTIA FICUS-INDICA</i> (L.) MILLER AS A SUSTAINABLE SOURCE FOR NATURAL DYES PRODUCTION</b>	
Maria MAISTO, Pierpaolo SCARANO, Daniele NAVIGLIO, Antonello PRIGIONIERO, Maria TARTAGLIA, Alessia POSTIGLIONE, Maria Antonietta RANAUDA, Daniela ZUZOLO, Rosaria SCIARRILLO, Carmine GUARINO .....	148
<b>WHY CONSUMERS PREFER GREEN FRIARIELLO PEPPER: CHANGES IN THE PROTEIN AND METABOLITE PROFILES ALONG THE RIPENING</b>	
Maria TARTAGLIA, Rosaria SCIARRILLO, Daniela ZUZOLO, Angela AMORESANO, Anna ILLIANO, Gabriella PINTO, Jesús V. JORRÍN-NOVO, Carmine GUARINO .....	149
<b>DEVELOPMENT OF NEW VARIETIES OF CAMELINA SATIVA THROUGH BREEDING PROGRAMS BASED ON PURE LINE METHOD AND BULK METHOD</b>	
Martina GHIDOLI, Matteo DELL'ANNO, Elena CASSANI, Stefano SANGIORGIO, Davide REGINELLI, Luciana ROSSI, Filippo GEUNA, Roberto PILU .....	150
<b>GENETIC IMPROVEMENT OF CUCURBITA MAXIMA FOR CAROTENOIDS CONTENT</b>	
Martina GHIDOLI, Stefano SANGIORGIO, Letizia GIGLIOTTI, Helga CASSOL, Alessio SEPULCRI, Davide REGINELLI, Patrizia RISO, Roberto PILU .....	151



<b>SALINITY TOLERANCE OF ITALIAN TRADITIONAL CEREAL VARIETIES</b>	
Mauro ROSCINI, Silvia DEL VECCHIO, Edy FANTINATO, Gabriella BUFFA .....	152
<b>MORPHOLOGICAL AND PRODUCTIVE CHARACTERIZATION OF SEVEN ACCESSIONS OF <i>CAPPARIS SPINOSA</i> L. SUBSP. <i>RUPESTRIS</i> IN LINOSA ISLAND IN ITALY</b>	
Nicolò IACUZZI, Mario LICATA, Salvatore LA BELLA, Teresa TUTTOLOMONDO, Davide FARRUGGIA .....	153
<b>PHYTOCHEMICAL CHARACTERIZATION OF STRAWBERRY TREE (<i>ARBUTUS UNEDO</i> L.) LEAVES AND FRUIT EXTRACTS AT VARIOUS RIPENESS</b>	
Pierpaolo SCARANO, Antonello PRIGIONIERO, Alessia POSTIGLIONE, Maria MAISTO, Maria Antonietta RANAUDA, Maria TARTAGLIA, Daniela ZUZOLO, Carmine GUARINO, Rosaria SCIARRILLO .....	154
<b>THE SOCIAALP PROJECT: REINTRODUCTION OF RYE AND WHEAT IN ANTRONA VALLEY BY VARIETAL COMPARISON</b>	
Gianni LICHERI, Nicolò FRANGUELLI, Federico COLOMBO, Martina GHIDOLI, Matteo DELL'ANNO, Stefano SANGIORGIO, Elena CASSANI, Luciana ROSSI, Roberto PILU.....	155
<b>CHEMICAL COMPOSITION OF GRAIN (<i>SORGHUM BICOLOR</i> L. MOENCH) UNDER EFFECT ON PLANT DENSITY AND NITROGEN APLICATION</b>	
Muftah KRAYEM.....	156
<b>EFFECT OF REDUCED TILLAGE, STRAW AND GREEN MANURE INCORPORATION ON WINTER WHEAT GRAIN QUALITY</b>	
Aušra SINKEVIČIENĖ, Vaclovas BOGUŽAS, Vaida STEPONAVIČIENĖ, Lina SKINULIENĖ, Alfredas SINKEVIČIUS.....	157
<b>LONG-TERM SOIL STABILITY REFLECTED BY COMPLEX MEASURES</b>	
Vaida STEPONAVIČIENĖ, Vaclovas BOGUŽAS, Lina SKINULIENĖ, Aušra SINKEVIČIENĖ, Alfredas SINKEVIČIUS.....	158
<b>EFFECT OF LIGHT PHOTOPERIOD ON GROWTH AND PHOTOSYNTHETIC INDICES OF KALE SEEDLINGS</b>	
Viktorija VAŠTAKAITĖ-KAIRIENĖ, Kristina LAUŽIKĖ, Giedrė SAMUOLIENĖ, Sigita JURKONIENĖ.....	159
<b>BIOFORTIFICATION OF MUSTARD MICROGREENS WITH IRON THROUGH LIGHTING AND NUTRITION STRATEGIES</b>	
Viktorija VAŠTAKAITĖ-KAIRIENĖ, Aušra BRAZAITYTĖ, Jurga MILIAUSKIENĖ, Kristina LAUŽIKĖ, Rūta SUTULIENĖ, Pavelas DUCHOVSKIS, Giedrė SAMUOLIENĖ .....	160
<b>THE EFFECTIVENESS OF PHYSIOLOGICAL METHODS FOR OPTIMIZING WORK ON THE ARRANGEMENT AND RESTORATION OF OAK FORESTS</b>	
Nina ZDIORUK, Alexandru DASCALIUC, Tudor RALEA, Nicolai PLATOVSCHII .....	161

<b>VARIABLE COMPONENTS DETERMINING THE PRIMARY RESISTANCE TO EXTREME TEMPERATURES OF THE WHEAT SEEDS REPRODUCED IN THE DIFFERENT CLIMATIC ZONE</b>	
Alexandru DASCALIUC, Tudor RALEA, Nina ZDIORUK .....	162
<b>SAFFLOWER (<i>CARTHAMUS TINCTORIUS</i> L.) ADAPTABILITY UNDER CHANGING CLIMATE OF PAKISTAN AS A RESILIENT QUALITY OILSEED CROP</b>	
Hassan MUNIR, Fahd RASUL, Muhammad SAJID, Saeed RAUF.....	163
<b><i>IN VITRO</i> CHARACTERIZATION OF FIXED OIL CONTENTS FROM CALLUS CULTURES OF JOJOBA (<i>SIMMONDSIA CHINENSIS</i> L.)</b>	
Muhammad AKRAM, FAHEEM AFTAB .....	164
<b>RESPONSE OF FINE RICE (<i>ORYZA SATIVA</i> L.) TO SOIL AND FOLIAR ZINC APPLICATION TO COMBAT ZINC MALNUTRITION</b>	
Muhammad BILAL.....	165
<b>EFFECT OF APPLICATION OF POTASSIUM, ZINC AND BOR ON AS POTENTIAL MODULATORS OF HEAT STRESS IN BT COTTON (<i>GOSSYPIUM HIRSUTUM</i> L.)</b>	
Muhammad SARWAR, Muhammad FARRUKH SALEEM, Najeeb ULLAH, Asjad ALI, Haroon ZAMAN KHAN , Muhammad ASHFAQ WAHID, Muhammad SHAHID.....	166
<b>IDENTIFICATION AND CHARACTERIZATION OF DOF TRANSCRIPTION FACTOR GENE FAMILY IN CASHEW (<i>ANACARDIUM OCCIDENTALE</i>)</b>	
Muhammad SHAFIQ, Maira SHAKEEL, Syed Agha ARMAGHAN ASAD ABBAS, Muhammad HASEEB, Numan ALI, Muhammad SALEEM HAIDER.....	167
<b>INNOVATIVE TRENDS IN VEGETABLE NURSERY PRODUCTION</b>	
Nabeel AHMAD IKRAM, Asif ALI KHAN, Abdul GHAFAR .....	168
<b>UTILIZATION OF AN AGRO-INDUSTRIAL BY-PRODUCT FOR MICROALGAL BIOMASS PRODUCTION</b>	
Agata PIASECKA, Izabela KRZEMIŃSKA .....	169
<b>INFLUENCE OF CITRATE NANOPARTICLES ON PHOTOCHEMICAL ACTIVITY, RESISTANCE TO PATHOGENS AND PRODUCTIVITY OF WHEAT</b>	
Hanna HULIAIEVA, Lidiia PASICHNY, Irina TOKOVENKO, Antonina KALINICHENKO, Volodymyr PATYKA, Mykhailo BOHDAN, Mykola PATYKA, Viktor MAKSYN .....	170
<b>THE INFLUENCE OF POTASSIUM FERTILIZATION AND IRRIGATION ON THE VITAMIN AND AMINO ACID CONTENT OF TUBERS OF JERUSALEM ARTICHOKE (<i>HELIANTHUS TUBEROSUS</i> L.)</b>	
Bożena BOGUĆKA, Krzysztof JANKOWSKI.....	171
<b>ESTIMATION OF YIELD LOSSES AT HARVEST FOR AN EARLY SOYBEAN CULTIVAR BY MEANS OF A MATHEMATICAL MODEL</b>	
Krzysztof RĘBILAS, Agnieszka KLIMEK-KOPYRA, Magdalena BACIOR, Tadeusz ZAJĄC....	172

**VISCOELASTIC PROPERTIES OF APPLES UNDER VARIOUS MECHANICAL LOADING CONDITIONS**

Krzysztof GOŁACKI..... 173

**THE INFLUENCE OF POTASSIUM FERTILIZATION AND IRRIGATION ON THE YIELD AND HEALTH STATUS OF JERUSALEM ARTICHOKE (*HELIANTHUS TUBEROSUS* L.)**

Bożena BOGUĆKA, Agnieszka PSZCZÓŁKOWSKA, Adam OKORSKI, Krzysztof JANKOWSKI ..... 174

**EVALUATION OF GRAPEVINE WATER DYNAMICS BY SAP FLOW AND TRUNK DIAMETER MEASUREMENTS UNDER MEDITERRANEAN CLIMATE**

Aureliano C. MALHEIRO, Nuno CONCEIÇÃO, Lia-Tânia DINIS, José MOUTINHO-PEREIRA ..... 175

**IMPORTANCE OF COFFEE PROCESSING TECHNIQUES ON COFFEE SENSORY PROFILE**

Dimitrie STOICA, Angela-Stela IVAN, Alina-Mihaela CANTARAGIU ..... 176

**INFLUENCE OF SOIL TYPES UPON SEED GERMINATION ON TOMATOES, PEPPERS, EGGPLANTS AND MELONS**

Gabriela ŞOVĂREL , Marcel COSTACHE, Gicuța SBÎRCIOG, Ion SCURTU, Simona HOGEA, Emilia CENUŞĂ, Mihaela BUZATU, Marius VELEA ..... 177

**GENE EXPRESSION IN SUGAR BEET UNDER SALT STRESS**

Ahmad HUSSEIN, Tatyana KRYUKOVA, Tatyana RUDENKO, Aleksandr MOISEENKO ..... 178

**MOLECULAR MARKERS FOR IDENTIFICATION OF GENES OF BREEDING-VALUABLE TRAITS OF *BETA VULGARIS* L.**

Arpine NALBANDYAN, Tatyana KRYUKOVA, Tatyana FEDULOVA, Elena VASILCHENKO ..... 179

**INVESTIGATION OF THE WAYS OF NEW HYBRID FORMS IN PEACH OBTAINING IN VITRO**

Irina MITROFANOVA, Nina LESNIKOVA-SEDOSHENKO, Svetlana CHELOMBIT, Olga MITROFANOVA ..... 180

**FORMATION OF PEA SEEDLINGS INFLUENCED BY FULVIC ACIDS AND FOLACIN**

Mariia SUBBOTINA, Katarina KOVACHEVICH ..... 181

**FEATURES OF THE REPRODUCTION AND PROPAGATION SYSTEM OF SOME SPECIES OF THE CAMPANULACEAE FAMILY**

Svetlana SHEVCHENKO, Natalia MIROSHNICHENKO ..... 182

**DNA-MARKERS AND GENETIC DIVERSITY OF *BETA VULGARIS* L.**

Tatyana KRYUKOVA , Arpine NALBANDYAN ..... 183

**CONTENT OF BIOACTIVE COMPOUNDS IN BIOMASS OF NATURAL LAWN OF  
ARRHENATHERETALIA**

Andelka POPADIĆ ..... 184

**THE USE OF TRITICALE MALTS IN WORT PRODUCTION**

Anja TAUŠAN, Milana PRIBIĆ..... 185

**THE INFLUENCE OF ROOTSTOCK ON WINTER COLD HARDINESS, PRODUCTIVITY  
AND FRUIT QUALITY OF SWEET CHERRY CULTIVAR ‘KORDIA’**

Boban ĐORĐEVIĆ, Dejan ĐUROVIĆ, Gordan ZEC, Djordje BOŠKOV ..... 186

**EFFECTS OF ROOT PRUNING ON GROWTH CONTROL AND FRUIT QUALITY OF  
APPLE CULTIVAR ‘GALA SHNIGA’**

Boban ĐORĐEVIĆ, Dejan ĐUROVIĆ, Gordan ZEC, Vladimir SKOKO ..... 187

**EFFECT OF CALCIUM CHLORIDE (CaCl<sub>2</sub>) ON THE QUALITY OF APPLE CV ‘RED  
CHIEF’ (*Malus × domestica* Borkh.) DURING STORAGE**

Boris RILAK, Jelena TOMIĆ, Ivan GLIŠIĆ, Milan LUKIĆ, Žaklina KARAKLAJIĆ-STAJIĆ,  
Svetlana PAUNOVIĆ, Marijana PEŠAKOVIĆ..... 188

**FOLIAR APPLICATION OF ZINC IN THE PRODUCTION OF RED CLOVER SEED ON  
ACID SOIL**

Dalibor TOMIĆ, Vladeta STEVOVIĆ, Dragan ĐUROVIĆ, Milomirka MADIĆ, Đorđe  
LAZAREVIĆ, Jasmina KNEŽEVIĆ, Miloš MARJANOVIĆ, Nenad PAVLOVIĆ, Andelka  
POPADIĆ..... 189

**SCREENING WHEAT ROOT AND SHOOT VARIABILITY AT SEEDLING STAGE**

Dejan DODIG, Vesna KANDIĆ, Milica BLAŽIĆ, Tomislav ŽIVANOVIĆ ..... 190

**VARIABILITY OF GRAIN SPIKE INDEX IN WHEAT (*TRITICUM AESTIVUM* L.)**

Desimir KNEŽEVIĆ, Dušan UROŠEVIĆ, Danica MIĆANOVIĆ, Aleksandar PAUNOVIĆ, Danijela  
KONDIĆ, Vesna ĐUROVIĆ, Adriana RADOSAVAC, Jelica ŽIVIĆ, Mirela MATKOVIĆ  
STOJŠIN, Milomirka MADIĆ, Veselinka ZEČEVIĆ ..... 191

**MORPHOLOGICAL AND PRODUCTION CHARACTERISTICS OF DIFFERENT  
TOMATO HYBRIDS GROWN IN GREENHOUSES**

Jelena PANTOVIĆ, Nenad PAVLOVIĆ, Jasmina ZDRAVKOVIĆ, Sofija KILIBARDA, Stefan  
GORDANIĆ, Maja SUDIMAC, Slavica JELAČIĆ, Đorđe MORAVČEVIĆ..... 192

**THE IMPORTANCE OF CUCUMBER SEEDLING IRRIGATION BY MEANS OF  
NUTRIENT SOLUTION**

Đorđe MORAVČEVIĆ, Marija ČOSIĆ, Aleksa LIPOVAC, Sandra VUKOVIĆ, Ana VUJOŠEVIĆ,  
Nenad PAVLOVIĆ, Milica STOJANOVIĆ ..... 193

**IMPACT OF SUBSTRATE VOLUME ON THE CUCUMBER SEEDLING QUALITY**

Đorđe MORAVČEVIĆ, Sandra VUKOVIĆ, Ana VUJOŠEVIĆ, Željko DOLIJANOVIĆ, Jelica  
GVOZDANOVIĆ-VARGA, Stefan GORDANIĆ, Sofija KILIBARDA ..... 194

<b>YIELD OF SWEET PEPPER (<i>CAPSICUM ANNUUM</i> L.) DEPENDING ON FERTILIZATION MANAGEMENT</b>	
Đorđe VOJNOVIĆ, Žarko ILIN, Vladimir SABADOŠ, Danijela DOROTIĆ-ŽUNIĆ, Boris ADAMOVIĆ, Nataša PRODANOVIĆ .....	195
<b>ANTIOXIDANT ACTIVITY ESTIMATION OF INNER AND OUTER SEED FRACTIONS OF THE LEGUMES <i>VIGNA RADIATA</i> L. AND <i>GLYCINE MAX</i> L.</b>	
Dragana BARTOLIĆ, Miloš PROKOPIJEVIĆ, Ksenija RADOTIĆ .....	196
<b>CHARACTERIZATION OF COLORED MAIZE SEED FRACTIONS USING FLUORESCENCE SPECTROSCOPY AND MULTIVARIATE ANALYSIS</b>	
Dragana BARTOLIĆ, Miloš PROKOPIJEVIĆ, Ksenija RADOTIĆ .....	197
<b>EFFECT OF DRYING TEMPERATURE ON ANTIOXIDANT ACTIVITY OF WHITE AND RED MAIZE (<i>ZEA MAYS</i> L.) SEEDS</b>	
Dragana BARTOLIĆ, Miloš PROKOPIJEVIĆ, Branka ŽIVANOVIĆ, Ksenija RADOTIĆ .....	198
<b>THE INFLUENCE OF THE VARIETY AND DIFFERENT DOSES OF NITROGEN ON THE GRAIN YIELD AND PROTEIN CONTENT IN TRITICALE GRAIN</b>	
Milan BIBERDŽIĆ, Dragana LALEVIĆ, Zoran S. ILIĆ, Lidija MILENKOVIĆ, Aleksandar VUKOVIĆ, Saša BARAĆ, Milomirka MADIĆ .....	199
<b>AZOTOBACTER, PSEUDOMONAS AND BACILLUS ISOLATES STIMULATE THE GERMINATION AND SEEDLING GROWTH OF <i>MELLISA OFFICINALIS</i></b>	
Dragana STAMENOV, Simonida ĐURIĆ, Timea HAJNAL JAFARI, Biljana KIPROVSKI, Vladimira SEMAN.....	200
<b>HYBRID × LOCATION INTERACTION IN A MAIZE EARLY TESTING USING FACTOR ANALYTIC APPROACH</b>	
Dušan STANISAVLJEVIĆ, Miroslav ZORIĆ, Bojan MITROVIĆ, Milosav BABIĆ, Petar ČANAK, Bojana VUJOŠEVIĆ, Milica PERIŠIĆ, Maja ŠUMARUNA .....	201
<b>AGRONOMIC PERFORMANCE OF ALMOND CULTIVARS IN SERBIA</b>	
Gordan ZEC, Dragan Milatović, Slavica ČOLIĆ, Đorđe BOŠKOV, Boban ĐORĐEVIĆ, Dejan ĐUROVIĆ .....	202
<b>VARIABILITY OF ZELENY SEDIMENTATION VOLUME IN BREAD WHEAT AND DURUM WHEAT FROM MULTI-ENVIRONMENT TRIAL</b>	
Gordana BRANKOVIĆ, Dejan DODIG, Desimir KNEŽEVIĆ, Nenad ĐURIĆ, Sanja VASILJEVIĆ, Irena RADINOVIĆ, Jovan PAVLOV.....	203
<b>EFFICIENCY OF HYDRO- AND OSMOPRIMING IN IMPROVING GARDEN PEA SEED QUALITY AND INITIAL PLANT DEVELOPMENT UNDER SALINE STRESS</b>	
Gordana TAMINDŽIĆ, Janko ČERVENSKI, Dragana MILOŠEVIĆ, Zorica NIKOLIĆ, Slobodan VLAJIĆ, Gordana PETROVIĆ, Maja IGNJATOV .....	204

<b>INTERACTION OF FERTILIZATION AND SOYBEAN GENOTYPE ON NUMBER OF PODS, WEIGHT OF 1000 GRAINS AND GRAIN YIELD</b>	
Gorica CVIJANOVIĆ , Vojin ĐUKIĆ , Marija BAJAGIĆ , Nenad ĐURIĆ , Gordana DOZET , Jovana SEKULIĆ, Nenad BOJAT .....	205
<b>RAMAN SPECTROSCOPIC STUDY OF SUGARS IN SUNFLOWER HONEY SAMPLES FROM ČESTEREG (VOJVODINA, SERBIA)</b>	
Ilinka PEĆINAR, Dragana RANČIĆ, Marina MAČUKANOVIĆ-JOCIĆ .....	206
<b>COULD CARBON DOTS ALLEVIATE COPPER TOXICITY IN MAIZE?</b>	
Ivana MILENKOVIĆ, Miroslav NIKOLIĆ, Manuel ALGARRA, Ksenija RADOTIĆ .....	207
<b>EFFECT OF ORANGE CARBON DOTS ON PHOTOSYNTHETIC PARAMETERS IN MAIZE</b>	
Ivana MILENKOVIĆ, Milan BORIŠEV, Yiqun ZHOU, Slađana Z. SPASIĆ, Roger LEBLANC, Ksenija RADOTIĆ .....	208
<b>QUANTITATIVE AND QUALITATIVE CHARACTERISTICS OF WINTER BARLEY IN CONDITIONS OF SOUTHERN SERBIA</b>	
Ivica STANČIĆ, Jelica ŽIVIĆ, Milić VOJINOVIĆ, Nemanja STANČIĆ.....	209
<b>FORAGE QUALITY OF PROMISING VETCH GENOTYPES</b>	
Jasmina MILENKOVIĆ, Snežana ANĐELKOVIĆ, Jordan MARKOVIĆ, Mirjana PETROVIĆ, Rade STANISAVLJEVIĆ, Dragoslav ĐOKIĆ, Vladimir ZORNIĆ .....	210
<b>INFLUENCE OF GENOTYPES AND ENVIRONMENT ON EGGPLANT FRUIT LENGTH AND WIDTH</b>	
Jelena DAMNJANOVIĆ, Suzana PAVLOVIĆ, Zdenka GIREK, Jelena MILOJEVIĆ, Slađan ADŽIĆ, Tomislav ŽIVANOVIĆ, Milan UGRINOVIĆ .....	211
<b>BIOPRIMING: A SUSTAINABLE SUPPORT FOR CROP ESTABLISHMENT</b>	
Slavica KEREČKI, Jelena JOVIČIĆ-PETROVIĆ, Igor KLJUJEV, Blažo LALEVIĆ, Vera KARLIČIĆ, Ivana PETROVIĆ, Vera RAIČEVIĆ .....	212
<b>BLUE LED LIGHT PROMOTES SOMATIC EMBRYOGENESIS FROM THE LATERAL ROOTS SECTIONS OF SPINACH (<i>SPINACIA OLERACEA</i> L)</b>	
Maja BELIĆ, Snežana ZDRAVKOVIĆ-KORAČ, Suzana PAVLOVIĆ, Suzana ŽIVKOVIĆ, Dragan VINTERHALTER, Dušica ČALIĆ, Jelena MILOJEVIĆ.....	213
<b>SUITABILITY OF FIELD PEA : OAT AND COMMON VETCH : OAT MIXTURES FOR ENSILING</b>	
Jordan MARKOVIĆ, Tanja VASIĆ, Mirjana PETROVIĆ, Jasmina MILENKOVIĆ, Filip BEKČIĆ, Đorđe LAZAREVIĆ, Snežana BABIĆ.....	214
<b>EVALUATION OF KANAMYCIN AND CEFOTAXIME EFFECTS ON PROLIFERATION, MORPHOLOGY AND GERMINATION RATE OF SOMATIC EMBRYOS IN <i>CENTAURIUM ERYTHRAEA</i> RAFN</b>	

Katarina ČUKOVIĆ, Slađana TODOROVIĆ, Milan DRAGIĆEVIĆ, Ana SIMONOVIĆ, Milica BOGDANOVIĆ.....	215
<b>STABILITY OF WHEAT CULTIVARS FOR YIELD AND QUALITY COMPONENTS IN DIFFERENT AGROECOLOGICAL CONDITIONS</b>	
Kristina LUKOVIĆ, Vladimir PERIŠIĆ, Veselinka ZEČEVIĆ, Kamenko BRATKOVIĆ, Milivoje MILOVANOVIĆ, Snežana BABIĆ, Snežana ANĐELKOVIĆ .....	216
<b>EFFECT OF ROOTSTOCKS ON GRAFTING WATERMELON PLANT GROWTH, YIELD AND QUALITY</b>	
Lidija MILENKOVIĆ, Ljubomir ŠUNIĆ, Dragana LALEVIĆ, Zoran S. ILIĆ .....	217
<b>EXPRESSION ANALYSIS OF COLD INDUCED GENES IN EARLY DEVELOPMENTAL STAGES OF MAIZE</b>	
Manja BOŽIĆ, Dragana IGNJATOVIĆ MICIĆ, Jelena VANČETOVIĆ, Ksenija MARKOVIĆ, Ana NIKOLIĆ .....	218
<b>ENERGY EFFICIENCY OF THE MINERAL FERTILIZER APPLICATION IN CEREAL PRODUCTION</b>	
Marija GAVRILOVIĆ, Aleksandra DIMITRIJEVIĆ, Zoran MILEUSNIĆ, Rajko MIODRAGOVIĆ, Milan UGRINOVIĆ, Radiša ĐORĐEVIĆ, Dejan CVIKIĆ .....	219
<b>GERMINATION OF DIANTHUS SEROTINUS SEED ORIGINATING FROM PLANTS PRODUCED BY MICROPROPAGATION</b>	
Marija MARKOVIĆ, Vesna GOLUBOVIĆ-ČURGUZ .....	220
<b>EFFECTS OF RED AND FAR-RED LIGHT ON SEED GERMINATION OF PLATANUS × ACERIFOLIA (AITON) WILLD.</b>	
Marija MARKOVIĆ, Mihailo GRBIĆ, Dragana SKOČAJIĆ, Danijela ĐUNISIJEVIĆ-BOJOVIĆ, Marijana MILUTINOVIĆ.....	221
<b>GERMINATION OF BUDDLEJA DAVIDII FRANCH. SEED EXPOSED TO RED AND FAR-RED LIGHT TREATMENTS</b>	
Marija MARKOVIĆ, Mihailo GRBIĆ, Dragana SKOČAJIĆ, Danijela ĐUNISIJEVIĆ-BOJOVIĆ, Marijana MILUTINOVIĆ.....	222
<b>GERMINATION OF PAULOWNIA FORTUNEI (SEEM.) HEMSL. SEED AFTER DIFFERENT RED AND FAR-RED LIGHT TREATMENTS</b>	
Marija MARKOVIĆ, Mihailo GRBIĆ, Dragana SKOČAJIĆ, Danijela ĐUNISIJEVIĆ-BOJOVIĆ, Marijana MILUTINOVIĆ.....	223
<b>GERMINATION OF RUDBECKIA FULGIDA VAR. SULLIVANTII 'GOLDSTURM' SEED UNDER DIFFERENT TREATMENTS</b>	
Marija MARKOVIĆ, Mihailo GRBIĆ, Dragana SKOČAJIĆ, Danijela ĐUNISIJEVIĆ-BOJOVIĆ, Marijana MILUTINOVIĆ.....	224

**EFFECTS OF THE SOWING DATE ON RELATIONSHIPS OF MORPHOLOGICAL PROPERTIES OF MAIZE EARS**

Marijenka TABAKOVIĆ, Rade STANISAVLJEVIĆ, Dobrivoj POŠTIĆ, Ratibor ŠTRBANOVIĆ, Violeta ORO, Milena ŠENK, Sveta RAKIĆ ..... 225

**LOW NICOSULFURON AND MESOTRIONE RATES INFLUENCE ON VARIOUS CROPS**

Milan BRANKOV, C. Bruno VIEIRA, Milena SIMIĆ, Željko DOLIJANOVIĆ, Miodrag TOLIMIR, Vesna DRAGIČEVIĆ ..... 226

**THE EVALUATION OF THE STABILITY OF SOME ZP MAIZE HYBRIDS BASED ON THE GENOTYPE × ENVIRONMENT INTERACTION**

Milan STEVANOVIĆ, Aleksandar KOVAČEVIĆ, Slaven PRODANOVIĆ, Milica NIKOLIĆ, Marko MLADENOVIĆ, Snežana MLADENOVIĆ DRINIĆ, Sanja PERIĆ ..... 227

**THE GRAIN YIELD STABILITY ANALYSIS OF THE ZP COMMERCIAL MAIZE HYBRIDS BASED ON MULTI-ENVIRONMENTAL TESTING**

Marko MLADENOVIĆ, Zoran ČAMDŽIJA, Aleksandar KOVAČEVIĆ, Sanja PERIĆ, Milan STEVANOVIĆ, Olivera ĐORĐEVIĆ MELNIK, Nikola GRČIĆ ..... 228

**YIELD COMPONENTS OF BIOMASS AND GRAIN OF SOYBEAN IN RESPONSE TO THE USE OF BIOFERTILIZER**

Milena ŠENK, Milena SIMIĆ, Milan BRANKOV, Marijenka TABAKOVIĆ, Branka KRESOVIĆ, Vesna PERIĆ, Vesna DRAGIČEVIĆ ..... 229

**INFLUENCES OF HERBICIDE TREATMENTS AND ROW SPACES ON THE MAIZE GROWTH AND YIELD PARAMETERS**

Milena SIMIĆ, Milan BRANKOV, Milosav BABIĆ, Željko DOLIJANOVIĆ, Branka KRESOVIĆ, Vesna DRAGIČEVIĆ ..... 230

**GRAIN YIELD IN MAIZE HYBRIDS OF DIFFERENT FAO MATURITY GROUPS**

Milomirka MADIĆ, Dragan ĐUROVIĆ, Vladeta STEVOVIĆ, Dalibor TOMIĆ, Milan BIBERDŽIĆ, Aleksandar PAUNOVIĆ ..... 231

**“HOPE IN HOPS” -PROJECT OF UTILIZING THE EXISTENT AND CREATING A NOVEL GENE POOL TO REVIVING HOPS PRODUCTION IN SERBIA**

Miodrag DIMITRIJEVIĆ, Sofija PETROVIĆ, Ján KIŠGECI, Tihomir ZORANOVIĆ, Ján BOŤÁNSKY, Borislav BANJAC, Jovan CRNOBARAC, Borivoj PEJIĆ, Vanja ERCEG ..... 232

**BIOFUNGICIDES IN THE PRODUCTION OF HEALTHY SEEDLINGS**

Miroslava MARKOVIĆ, Renata GAGIĆ – SERDAR, Marija MILOSAVLJEVIĆ, Snežana STAJIĆ ..... 233

**IN VITRO ANTIOXIDANT ACTIVITY OF *SATUREJA KITAIBELII* WIERZB. EX HEUFF. SUBCRITICAL WATER EXTRACT**

Nemanja ŠPIRIĆ, Vanja ŠEREGELJ, Vesna TUMBAS, Ojka ŠOVLJANSKI, Ana TOMIĆ, Milica AĆIMOVIĆ ..... 234



**INFLUENCE OF GEOGRAPHICAL ORIGIN ON ANTIMICROBIAL ACTIVITY OF *ROSMARINUS OFFICINALIS* L. ESSENTIAL OILS**

Nikola CVETKOVIĆ, Ana TOMIĆ, Olja ŠOVLJANSKI, Saša ĐUROVIĆ, Siniša MARKOV .... 235

**ASSOCIATION AMONG SUNFLOWER YIELD CONTRIBUTING TRAITS IN VARIOUS ECOLOGICAL CONDITIONS**

Petar ČANAK, Milan MIROSAVLJEVIĆ, Milan JOCKOVIĆ, Miroslav ZORIĆ, Bojana VUJOŠEVIĆ, Dušan STANISAVLJEVIĆ, Vladimir MIKLIČ ..... 236

**INFLUENCE OF LOCATION ON PHENOLOGICAL AND PRODUCTION PROPERTIES OF RASPBERRY (*RUBUS IDAEUS* L.)**

Radmila ILIĆ, Ivan GLIŠIĆ, Tomo MILOŠEVIĆ, Gorica PAUNOVIĆ, Tomislav ĆURČIĆ ..... 237

**TOTAL FLAVONOID CONTENT IN EDIBLE PARTS OF SELECTED *ALLIUM* SPECIES**

Sandra VUKOVIĆ, Đorđe MORAVČEVIĆ, Jelica GVOZDANOVIĆ-VARGA, Ilinka PEĆINAR, Ana VUJOŠEVIĆ, Sofija KILIBARDA, Danijel D. MILINČIĆ, Stefan GORDANIĆ, Dragoljub PAVLOVIĆ, Aleksandar Ž. KOSTIĆ ..... 238

**HYDROXYCINNAMICACID DERIVATIVES: POTENTIAL ANTIOXIDANTS IN RARE GROWN *ALLIUM* SPECIES FROM SERBIA**

Sandra VUKOVIĆ, Đorđe MORAVČEVIĆ, Jelica GVOZDANOVIĆ-VARGA, Ilinka PEĆINAR, Ana VUJOŠEVIĆ, Sofija KILIBARDA, Danijel D. MILINČIĆ, Stefan GORDANIĆ, Dragoljub PAVLOVIĆ, Aleksandar Ž. KOSTIĆ ..... 239

**RESULTS OF TESTING OF SEEDERS WITH DIFFERENT SOWING MECHANISMS IN MAIZE SOWING**

Saša BARAĆ, Dragan PETROVIĆ, Milan BIBERDŽIĆ, Rade RADOJEVIĆ, Aleksandar Đikić, Aleksandar VUKOVIĆ, Dragana LALEVIĆ ..... 240

**CHEMICAL AND PHYSICAL PROPERTIES OF SOIL UNDER PLANTATIONS OF OBLACINSKA CHERRY IN TOPLICA DISTRICT**

Slađana GOLUBOVIĆ, Jugoslav TRAJKOVIĆ, Sanja PERIĆ, Milić VOJINOVIĆ, Dušica ĆIRKOVIĆ ..... 241

**‘LEDA’ A NEW SOUR CHERRY CULTIVAR**

Slavica ČOLIĆ, Ivana BAKIĆ, Dragan RAHOVIĆ, Gordan ZEC, Zoran JANKOVIĆ, Aleksandar TABAKOVIĆ, Ivana GLIŠIĆ, Žaklina KARAKLAJIĆ-STAJIĆ ..... 242

**THE EFFECT OF ACTINOMYCETES APPLICATION ON GREEN MASS YIELD OF RED CLOVER**

Snežana ANDJELKOVIĆ, Zoran LUGIĆ, Snežana BABIĆ, Jasmina MILENKOVIĆ, Goran JEVTIĆ, Jordan MARKOVIĆ, Filip BEKČIĆ ..... 243

**ANALYSIS OF THE RELATIONSHIP OF THE MOST IMPORTANT TRAITS IN MEADOW FESCUE**

Snežana BABIĆ, Dejan SOKOLOVIĆ, Snežana ANĐELKOVIĆ, Mirjana PETROVIĆ, Vladimir ZORNIĆ, Mladen PRIJOVIĆ, Filip BEKČIĆ ..... 244

**EFFECTS OF IBA STIMULATORS ON PROPAGATION OF *LAVANDULA ANGUSTIFOLIA* MILL. BY SOFTWOOD CUTTINGS**

Snežana MRĐAN, Dragoja RADANOVIĆ, Jovan CRNOBARAC, Tatjana MARKOVIĆ, Ana DRAGUMILO, Vladimir FILIPOVIĆ, Stefan GORDANIĆ, Sara MIKIĆ, Željana PRIJIĆ ..... 245

**THE EFFECT OF SODIC SOIL ABIOTIC STRESS CONDITIONS ON PHENOTYPE VARIATION OF SPIKE TRAITS IN HIGH YIELDING BREAD WHEAT**

Sofija PETROVIĆ, Miodrag DIMITRIJEVIĆ, Borislav BANJAC..... 246

**EFFECT OF DIFFERENT STRATIFICATION DURATIONS ON INCREASED GERMINATION OF *ALLIUM URSINUM* SEEDS**

Stefan GORDANIĆ, Dragoja RADANOVIĆ, Tatjana MARKOVIĆ, Aleksandar Ž. KOSTIĆ, Sandra VUKOVIĆ, Sofija KILIBARDA, Đorđe MORAVČEVIĆ ..... 247

**INFLUENCE OF GROWTH BIOREGULATORS ON SEED GERMINATION OF SOME MEDICINAL AND AROMATIC PLANTS**

Stefan GORDANIĆ, Đorđe MORAVČEVIĆ, Dragoja RADANOVIĆ, Tatjana MARKOVIĆ, Aleksandar Ž. KOSTIĆ, Sandra VUKOVIĆ, Snežana MRĐAN, Sofija KILIBARDA, Vladimir FILIPOVIĆ, Sara MIKIĆ, Željana PRIJIĆ ..... 248

**DEVELOPMENT AND IMPLEMENTATION OF METHODS TO DETERMINE AN AGE STRUCTURE IN HARE POPULATION IN HUNTING GROUNDS OF SERBIA**

Stefan STEPIĆ, Zoran POPOVIĆ, Mladen POPOVAC, Dejan BEUKOVIĆ, Vukan LAVADINOVIĆ..... 249

**THE INFLUENCE OF AGROECOLOGICAL CONDITIONS OF GROWING ON THE SMOKE SENSORY PROPERTIES OF BURLEY TOBACCO**

Vesna RADOJIČIĆ, Lazar PEJIĆ, Željko DOLIJANOVIĆ..... 250

**RESEARCH OF HUMUS REPRESENTATION IN AGRICULTURAL LAND**

Vladimir SABADOŠ, Danijela ŽUNIĆ, Nataša PRODANOVIĆ ..... 251

**INFLUENCE OF DIFFERENT DENSITIES DURING SOWING ON BUCKWHEAT (*FAGOPIRUM ESCULENTUM* L.) YIELD AS A SUBSEQUENT IN AGRICULTURE**

Vladimir SABADOŠ Danijela ŽUNIĆ ..... 252

**GENERAL COMBINING ABILITY AND HETEROSIS OF SEX EXPRESSION TRAITS IN MELON**

Zdenka GIREK, Suzana PAVLOVIĆ, Jelena DAMNJANOVIĆ, Slađan ADŽIĆ, Milan UGRINOVIĆ, Dejan CVIKIĆ, Nenad PAVLOVIĆ ..... 253

***SATUREJA MONTANA* L. CULTIVATION UNDER PERMEABLE MULCH FILM IN DRY FARMING CONDITIONS OF SOUTH BANAT (SERBIA)**

Dragoja RADANOVIĆ, Snežana MRDJAN, Ana DRAGUMILO, Tatjana MARKOVIĆ, Vladimir FILIPOVIĆ, Željana PRIJIĆ, Stefan GORDANIĆ ..... 254

**GENETIC RESOURCES OF SERBIAN NATIVE HERBACEOUS PEONIES**

Zeljana PRIJIC, Tatjana MARKOVIC, Biljana PANJKOVIC, Dragoja RADANOVIC, Sara MIKIC, Snezana MRDJAN, Vladimir FILIPOVIC ..... 255

**THE IMPACT OF INTEGRATED GROWING SYSTEM AND TOP DRESSING IN PRODUCTIVITY OF WINTER WHEAT**

Željko DOLIJANOVIĆ, Snežana OLJAČA, Dušan Kovačević, Milena SIMIĆ, Srđan ŠEREMEŠIĆ, Nemanja GRŠIĆ ..... 256

**INFLUENCE OF VINEYARD GRASS COVER ON TECHNOLOGICAL CHARACTERISTICS OF WINE GRAPE CULTIVARS**

Zoran PRŽIĆ, Željko DŽELETOVIĆ, Aleksandar SIMIĆ, Nebojša MARKOVIĆ, Zorica RANKOVIĆ VASIĆ, Marija ČOSIĆ, Mariana NICULESCU ..... 257

**SOIL ORGANIC MATTER AND SOIL STRUCTURE IN LONG-TERM FERTILIZED SANDY SOIL**

Vladimír ŠIMANSKÝ, Nora POLLÁKOVÁ, Jerzy JONCZAK ..... 258

**RESPONSE OF BARLEY (*HORDEUM VULGARE* L.) TO FOLIAR APPLICATION OF SILICON**

Anja MAVRIČ, Aleksandra GOLOB, Nina KACJAN MARŠIĆ, Mateja GERM ..... 259

**EVALUATION OF PRESRAUTING AND DIRECT COVERING TO ENHANCE EARLY TUBER YIELD OF POTATO CROPS (*SOLANUM TUBEROSUM* L.)**

Dragan ŽNIDARČIČ ..... 260

**ANALYSIS OF THE CLIMATOLOGICAL VARIABLES AND THE INDEX NDVI IN THE CULTIVATION OF THE OLIVE TREE IN EXTREMADURA (SPAIN)**

Fulgencio HONORIO GUIADO, Abelardo GARCÍA MARTIN, Luis L. PANIAGUA SIMÓN, Francisco J. REBOLLO CASTILLO, Francisco MORAL GARCÍA, Adélia OLIVEIRA DE SOUSA, Carina DE NÓBREGA BARCELOS, José R. MARQUES DA SILVA ..... 261

**TRENDS IN EVAPOTRANSPIRATION IN THE SOUTHWEST OF THE IBERIAN PENINSULA, IN THE CONTEXT OF GLOBAL WARMING**

Abelardo GARCÍA-MARTÍN, Luis L. PANIAGUA, Fulgencio HONORIO, Francisco J. MORAL, Francisco J. REBOLLO, Virginia ALBERDI ..... 262

**GENOTYPING OF SOME SELF-(IN) COMPATIBILITY SI/SC RESPONSIBLE GENES ( $S_x$ ,  $S_F$ -RNASE) IN SOME ALMOND CULTIVARS**

Najwa M. ALHAJJAR, Bayan M. MUZHER ..... 263

**IMPACT OF PRUNING LEVEL ON THE PRODUCTIVITY AND QUALITY PARAMETERS OF CARIGNAN WINE GRAPE CULTIVAR UNDER AS-SWEIDA GOVERNORATE CONDITIONS**

Bayan M. MUZHER, Ola T. ALHALABI, Samer ABOU-HAMDAN ..... 264

**FRUITING PATTERNS OF SOME STRAWBERRY CULTIVARS IN OPEN FIELD AND GREENHOUSE CONDITIONS**

Derya MISIR, Ayşenur KANDEMİR, Dilek SOYSAL, Adis LIZALO, Leyla DEMİRSOY .....	265
<b>THE EFFECT OF CLIMATE CHANGE AND THE INFORMATION SOURCES USED IN THE ENTERPRISES PRODUCING SUNFLOWERSEED</b>	
Aysun YENER ÖGÜR, Muzaffer KAYGUSUZ, Şiyar BİLİK, Murat ALP.....	266
<b>AGRO-MORPHOLOGICAL CHARACTERIZATION OF SIX-ROW BARLEY (<i>HORDEUM VULGARE</i> CONVAR. <i>HEXASTICHON</i> L.) LANDRACES</b>	
Guray AKDOĞAN, Berk BENLIOĞLU, Namuk ERGUN, Huseyin DEMIRCI, Melih BILIR, Sinan AYDOĞAN, Ismail SAYIM.....	267
<b>ROLE OF DIFFERENT PHOSPHORUS LEVELS ON THE SEED YIELD AND SOME YIELD COMPONENTS OF CLUSTER BEAN (<i>Cyamopsis tetragonoloba</i> (L.) Taub.)</b>	
Hakan GEREN, Tugce OZDOĞAN CAVDAR, Zeynep SEN, Ahmet Sefa KUKTAS .....	268
<b>GRAIN YIELD AND SOME AGRONOMICAL CHARACTERISTICS OF TEFF [<i>Eragrostis teff</i> (Zucc.) Trotter] AS AFFECTED BY SOWING DATES</b>	
Hakan GEREN, Tugce OZDOĞAN CAVDAR, Aleksandar SIMIC, Zeljko S. DZELETOVIC .....	269
<b>GROWTH AND DEVELOPMENT OF ‘ALBION’, ‘PORTOLA’ AND ‘SWEET ANN’ DAY-NEUTRAL STRAWBERRY VARIETIES IN SUMMER AND FALL CROP PRODUCTION</b>	
Nazlı ATEŞ, Dilek SOYSAL, Derviş Emre DOĞAN, Leyla DEMİRSOY .....	270
<b>Keywords: <i>Day-neutral strawberry, Summer crop production, Growing, Development, Seasonal variation</i> .....</b>	<b>270</b>
<b>EVALUATION OF TURKEY STONE FRUIT SAPLING PRODUCTION</b>	
Mehmet SÜTYEMEZ .....	271
<b>THE DEVELOPMENT OF <i>CONVOLVULUS ARVENSIS</i> COLLECTED FROM DIFFERENT PROVINCES UNDER DIFFERENT TEMPERATURE AND CO<sub>2</sub> CONDITIONS</b>	
Yucel KARAMAN, Nihat TURSUN, Ahmet ULUDAG .....	272
<b>THE EFFECTS OF THE ESSENTIAL OIL OF PENNYROYAL (<i>MENTHA PULEGIUM</i> L.) ON THE GERMINATION OF SOME WEED AND CROPSEEDS</b>	
Yucel KARAMAN, Nihat TURSUN.....	273
<b>DETERMINATION OF THE EFFECT OF CONVENTIOANL AND REDUCED TILLAGE SISTEMS ON WEED DENSITY IN WHEAT PRODUCTION</b>	
Osman Mert YAZ, Sakine ÖZPINAR .....	274
<b>‘KSU-46’ WALNUT CULTIVAR</b>	
Mehmet SÜTYEMEZ, Şakir Burak BÜKÜCÜ, Akide ÖZCAN.....	275
<b>DETERMINATION OF THE PRODUCTIVITY AND DEVELOPMENT STATUS OF THE SECONDARY BUDS IN THE KARAERIK GRAPE VARIETY</b>	
Muhammed KUPE, Sezai ERCISLI .....	276

<b>FATTY ACID DIVERSITY IN CULTIVATED AND WILD APRICOTS FROM EASTERN ANATOLIA IN TURKEY</b>	
Mehmet Ramazan BOZHUYUK, Sezai ERCISLI .....	277
<b>EVALUATION OF THE EFFECT OF TESBI (<i>STYRAX OFFICINALIS</i> L.) SEED EXTRACTS ON SEEDLING DEVELOPMENT OF SOME PLANTS</b>	
Tansu USKUTOĞLU, Belgin COŞGE ŞENKAL, Hülya DOĞAN .....	278
<b>THE INFLUENCE OF NITROGEN ON THE GRAIN YIELD AND SOME AGRONOMIC CHARACTERISTICS OF SWEET SORGHUM (<i>Sorghum bicolor</i> var. <i>saccharatum</i>)</b>	
Tugce OZDOGAN CAVDAR, Esra CAM, Hakan GEREN .....	279
<b>POTENTIAL GROWTH AND HERBAGE PRODUCTIVITY OF COMMON BURNET (<i>Poterium sanguisorba</i>) AS AFFECTED BY NITROGEN FERTILIZATION</b>	
Tugce OZDOGAN CAVDAR, Deniz Alp AKCAY, Hakan GEREN .....	280
<b>THE COMPARISON ANALYSIS OF SOFTWARE FOR MANTEL TEST BETWEEN DNA MARKERS AND MORPHOLOGICAL TRAITS OF PLANT VARIETIES</b>	
Larysa PRYSIAZHNIUK, Yevhenii STARYCHENKO, Svitlana HRYNIV, Yuliia SHYTIKOVA, Nadiia LESHCHUK, Serhii MELNYK, Oksana KLIACHENKO .....	281
<b>FEATURES OF CHEMICAL COMPOSITION AND TECHNOLOGICAL CHARACTERISTICS OF ROOT OF SUGAR BEET GENOTYPES</b>	
Oksana KLIACHENKO, Larysa PRYSIAZHNIUK .....	282
<b>BIOCHEMICAL PROFILING OF SUNFLOWER HYBRIDS (<i>HELIANTHUS ANNUUS</i> L.) IN THE ASPECT OF HERBICIDES RESISTANCE</b>	
Oksana KLYACHENKO, Artur LIKHANOV, Anatolii YUNYK, Svitlana KALENSKA .....	283
<b>2. PLANT PROTECTION AND FOOD SAFETY.....</b>	<b>284</b>
<b>CHEMICAL ANALYSIS AND SENSORY EVALUATION OF “DOMIATI CHEESE” USING STRAINS ISOLATED FROM ALGERIAN GOAT MILK</b>	
Abderrahim CHERIGUENE, F. CHOUGRANI.....	285
<b>IN VITRO STUDY OF THE LARVICIDAL ACTIVITY OF HYDRO-ALCOHOLIC EXTRACT <i>URTICA MEMBRANACEA</i> POIR. ON <i>TUTA ABSOLUTA</i></b>	
Farial KRACHE, Malika BOUALEM, Fouzia BENOURED, Djilali BENABDELMOUMENE, Mohamed BOUCHARB, Nacer DEFOUS .....	286
<b>CULTURE OF THE SPECIES <i>PORTULACA OLERACEA</i> L. IN THE ALGERIAN OASES OF THE NORTHEASTERN SAHARA</b>	
Fatiha HADJAJDI-BENSEGHIER, HADJAJDI SAWSEN .....	287
<b>CONTRIBUTION TO THE DEMONSTRATION OF THE EFFECT OF HIGH TEMPERATURES ON ANTIBIOTIC RESIDUES IN MILK</b>	
Fatima IDRIS KHODJA, Kaddour ZIANI, Nisserine HAMINI KADAR .....	288

<b>BIOECOLOGICAL STUDY OF THE PSYLL OF THE OLIVE TREE EUPHYLLURA OLIVINA COSTA 1839 (HEMIPTERA: APHALARIDAE) IN NORTH WEST ALGERIAN (MOSTAGANEM, RELIZANE AND MASCARA)</b>	
Ouezzani KARIMA, Boualem M., Ghoulamallah A. ....	289
<b>GRAIN WEIGHT LOSS AND DEVELOPMENT OF SITOPHILUS ORYZAE (L.) ON NEEM INSECTICIDE TREATED WHEATS AT DIFFERENT STORAGE PERIODS</b>	
Dipali Rani DAS, Saiful Islam FARUKI.....	290
<b>VIROLOGICAL RESEARCH ON ŽILAVKA AND BLATINA LOCAL GRAPE VARIETIES</b>	
Ana CRNOGORAC, Ana MANDIĆ, Emanuela NORIS, Salvatore DAVINO Slavica MATIĆ ....	291
<b>MICROBIOLOGICAL STATUS OF WATER IN FOOD INDUSTRY OF ANIMAL ORIGIN IN REPUBLIC OF SRPSKA (BOSNIA AND HERZEGOVINA) IN THE PERIOD 2018-2020 IN RELATION TO THE EXAMINED PARAMETERS</b>	
Bojan GOLIĆ, Vesna KALABA, Tanja ILIĆ.....	292
<b>REAL TIME PCR AND LAMP METHODS FOR DETECTION OF FLAVESCENCE DORÉE</b>	
Mišaela VAKIĆ, Toufic ELBEAINO, Mihajlo VORUNA, Duška DELIĆ .....	293
<b>SURVEY ON THE PRESENCE OF ERWINIA AMYLOVORA, THE CAUSAL AGENT OF FIRE BLIGHT IN REPUBLIC OF SRPSKA DURING 2016-2020</b>	
Vojislav TRKULJA, Gordana BABIĆ, Bojana ĆURKOVIĆ, Bojana VUKOVIĆ, Jelena MIHIĆ SALAPURA, Jovana PRIJIĆ, Bogdan NEDIC .....	294
<b>ASSESSMENT OF IN VITRO PROAPOPTOTIC AND GENOTOXIC POTENTIAL OF AGRO BIOSTIMULANT KAISHI ON HUMAN CELLS</b>	
Georgi ANTOV, Zlatina GOSPODINOVA, Mariyana GEORGIEVA, Violeta VELIKOVA.....	295
<b>RESISTANCE OF MAIZE HYBRIDS TO EUROPEAN CORN BORER (OSTRINIA NUBILALIS HUEBNER) UNDER THE CONDITIONS OF CENTRAL NORTHERN BULGARIA</b>	
Lilyana KOLEVA, Georgi DIMITROV, Janet KOSTOVA.....	296
<b>IDENTIFICATION OF MITES ASSOCIATED WITH CITRUS CROP (Citrus sp.) IN THE DEPARTMENT OF CALDAS, COLOMBIA</b>	
Daniel CASTAÑO-SUAREZ, Juan Manuel OSORNO-MARÍN, Edwin Javier QUINTERO-GUTIÉRREZ, Carolina ZAMORANO-MONTAÑEZ .....	297
<b>EFFECT OF BENEFICIAL BACTERIUM BACILLUS SUBTILIS ON THE GREATER WAX MOTH (GALLERIA MELLONELLA) MORTALITY</b>	
Ivana MAJIĆ, Tena JELIĆ, Gabriella KANIŽAI ŠARIĆ, Marin KOVAČIĆ, Zlatko PUŠKADIJA, Emilija RASPUDIĆ, Ankica SARAJLIĆ .....	298
<b>INFLUENCE OF ENDOPHYTIC FUNGI ON WHEAT DISEASE INCIDENCE</b>	
Jelena ILIC, N. PILINGER, J. COSIC, K. VRANDECIĆ .....	299

<b>CONSUMERS' BEHAVIOR TOWARDS FOOD WASTE: A CASE STUDY OF FAYOUM, EGYPT</b>	
Mahmoud ABDELSALAM AHMED MOHAMED .....	300
<b>EFFECT OF SOME POTASSIUM SALTS ON ONION PURPLE BLOTCH INCIDENCE AND SOME PHYSIOLOGICAL AND YIELD PARAMETERS IN ONION SEED PLANTS</b>	
Hanan S. SOFY, Hoda M. H. AHMED, Maisa L. ABD-EL-MONEIM, Mohamed A. A. HASSAN .....	301
<b>EFFECT OF POTASSIUM SALTS ON ONION PURPLE BLOTCH INCIDENCE AND SOME PHYSIOLOGICAL AND YIELD PARAMETERS IN ONION SEED PLANTS</b>	
Hanan S. SOFY, Hoda M.H. AHMED , Maisa L. ABD-EL-MONEIM, Mohamed HASSAN.....	302
<b>ORGANOLEPTIC CHARACTERISTICS EVALUATION OF DIAB MANGO FRUITS AS AFFECTED BY HOT WATER TREATMENTS</b>	
S.M.A. SARRWY, Dorria M.M. AHMED, Aml R.M. YOUSEF .....	303
<b>SRAP MARKERS ASSOCIATED WITH RESISTANCE TO LOOSE SMUT IN SOME EGYPTA IN BARLEY GENOTYPES</b>	
Ismeal A. KHATAB, Samah, A. MARIEY, Sherin Ph. MIKHAIL .....	304
<b>EFFICACY OF TWO NATURAL EXTRACTS AND ANTIOXIDANTS IN REDUCING POWDERY MILDEW DISEASE OF BARLEY</b>	
Sherin Ph. MIKHAEEL, M. MANSOUR , Hoda E.A. IBRAHIM .....	305
<b>THE PHYTOSTIM PROJECT (2021-2025): TOWARD AN INTEGRATIVE ANALYSIS OF PHYTOSTIMULANT MODE OF ACTION AND ACCEPTANCE</b>	
Cécile CABASSON, Nicolas GUIBERT, Sabri NAJAI, Joana JORLY, Pierre PETRIACQ, Sylvain PRIGEANT, Frédéric DELMAS, Michel HERNOULD, Jean-Marc DEOGRATIAS, Maïder SAINT JEAN, Yves GIBON.....	306
<b>CRYSTALLIZATION BEHAVIOR OF COCOA BUTTER: THE INFLUENCE OF REGIONAL ORIGIN IN COLOMBIA: TUMACO - HUILA - SANTANDER</b>	
M. BIGOT, A. CAMPAIGNOLLE, V. CHARPENTIER, J. FREULARD, A. MESSENGER, Daniel J. E. KALNIN .....	307
<b>VALORISATION OF CAROB FLOUR (CERATONIA SILIQUA L.) IN THE BISCUITRY AND PASTRY SECTORS</b>	
S. ANGER, A. CECCALDI, M. GIDOIN, L. KIEFFER, D. KALNIN, Ludovic ANDRES .....	308
<b>PHYSICO-CHEMICAL CHARACTERIZATION AND THE FUNCTIONING OF PLANTAIN BANANA FLOUR BY REPORTING THEIR ORIGIN</b>	
A. BEJA, M.-V. DOUZEAU D'ACALET, E. NDJIE, C. TAKOUGANG, H. BOUVET, J.-R. AUGUSTIN, D. KALNIN, Ludovic ANDRES .....	309
<b>INTRODUCTION AND VALORISATION OF HONEY IN A SEASONAL BEER</b>	
BOULAYM, M. MALIGE, J. OGE, ROUTHIAUL, Ludovic ANDRES .....	310

<b>BIOSTIMULANTS IN HORTICULTURE: HOW DIFFICULT IS IT TO VALUE TECHNO-ECONOMIC COMPROMISES?</b>	
Cécile CABASSON, Nicolas GUIBERT, Maïder SAINT JEAN.....	311
<b>POPULATION DYNAMICS OF CONFUSED FLOUR BEETLE, <i>TRIBOLIUM CONFUSUM</i> JACQUELIN DU VAL IN GRAIN MILLS</b>	
Ebraheem AL-JOURI, Fatima SHIHADI, Sliman SLIMAN.....	312
<b>INFLUENCE OF SOWING DATE OF THE MAIZE HYBRID "BASSEL 1" ON THE INFESTATION LEVEL OF STEM BORERS IN DEIR EZ-ZOR REGION, SYRIA</b>	
Ebraheem AL-JOURI.....	313
<b>WEED CONTROL IN PARSLEY: COMPARATIVE PHOTOMETRIC ANALYSIS</b>	
Fiona SAILER, Julia HELFERT, Iryna SMETANSKA.....	314
<b>EVALUATION OF POLYHENOL EXTRACTION FROM APPLE POMACE</b>	
Faraja Deo GONELIMALI, Beatrix SZABÓ-NÓTIN, Lilla SZALÓKI-DORKÓ, Ákos RIBÁRSZKI, Mónika MÁTÉ.....	315
<b>EFFECT OF GELATIN BASED EDIBLE COATINGS ON MINIMALLY PROCESSED APPLE (<i>MALUS DOMESTICA</i> BORKH) CUBES</b>	
Pradeep KUMAR, Dóra SZÉKELY, Mónika MÁTÉ.....	316
<b>EFFECT OF PRETREATMENT OF SEED WITH COLD PLASMA ON SOME PHYSIOLOGICAL AND QUALITY TRAITS OF SUNFLOWER (<i>HELIANTHUS ANNUUS</i> L.) PLANT IN COMPLETION WITH WEEDS</b>	
Mojgan KHAKIAN, Hassan MAKARIAN, Mehdi BARADARAN FIROUZ ABADI, Hossein MIRZAEI MOGHADAM, Mehdi MOMENI, Maziar FARZINBEH .....	317
<b>THE EFFECT OF EDIBLE COATING BASED ON THE RICE BRAN OIL AND ACETYLATED POTATO STARCH ON QUALITY CHARACTERISTICS OF GRAPE</b>	
Masoud TAGHIZADEH, Azin OMID JEIVAN.....	318
<b>IRANIAN KISHK AS A SOURCE OF LACTIC ACID BACTERIA PRODUCING EXOPOLYSACCHARIDE</b>	
Mohammad Reza EDALATIAN DOVOM, Paria RAHNAMA VOSOUGH, Mohammad B. HABIBI NAJAFI, Ali JAVADMANESH, Baltasar MAYO.....	319
<b>ETIOLOGY AND INCIDENCE OF PISTACHIO ENDOCARP LESION DISORDER IN PISTACHIO ORCHARDS OF KERMAN PROVINCE, IRAN</b>	
Somayeh SADR, Vahid MOZAFARI.....	320
<b>INVASIVENESS, DAMAGE, AND MANAGEMENT OF THE SUPERVECTOR WHITEFLY <i>BEMISIA TABACI</i> IN AGRICULTURAL CROPS</b>	
Murad GHANIM.....	321
<b>A PLANT DISEASE COMPLEX BETWEEN A PLANT PARASITIC NEMATODE AND A FUNGUS - REEVALUATING <i>PRATYLENCHUS CAPSICI</i> DISEASE ETIOLOGY</b>	



Sigal BRAUN MIARA, Abraham GAMLIEL, Patricia BUCKI, Svetlana DUVRININ, Ohad AVRAHAM, Marina BENICHIS, Xue QING.....	322
<b>STUDIES OF <i>XYLELLA FASTIDOSA</i> IN THE XYLEM SAP OF OLIVE AND OLEANDER</b>	
Antony SURANO, Raied ABOU KUBAA, Pasquale SALDARELLI, Maria SAPONARI .....	323
<b>PROFILE OF ANTIBACTERIAL ACTIVITY OF MORINGA OLEIFERA LEAF EXTRACTS AGAINST THE PHYTOPATHOGEN XANTHOMONAS CAMPESTRIS PV. CAMPESTRIS</b>	
Anna CAPRONI, Riccardo FONTANA, Giovanna MACCHI, Irene GUGEL, Giorgia ROSSETTI, Mariaconcetta SICURELLA, Mattia BURATTO, Mariangela PAPPADÀ, Francesca SALVATORI, Raissa BUZZI, Anna BALDISSEROTTO, Stefano MANFREDINI, Peggy MARCONI.....	324
<b>ANTIBACTERIAL ACTIVITY OF MORINGA OLEIFERA LEAF EXTRACTS AGAINST THE PLANT PATHOGEN ERWINIA AMYLOVORA</b>	
Riccardo FONTANA, Giovanna MACCHI, Anna CAPRONI, Irene GUGEL, Mariaconcetta SICURELLA, Mariangela PAPPADÀ, Francesca SALVATORI, Mattia BURATTO, Anna BALDISSEROTTO, Stefano MANFREDINI, Peggy MARCONI .....	325
<b>DEPENDENCE OF THE CHEMICAL COMPOSITION OF COWSLIP (PRIMULA VERIS L.) INFLORESCENCES ON THE SOIL</b>	
Aurelija PAULAUSKIENĖ, Živilė TARASEVIČIENĖ .....	326
<b>EXOGENOUSLY APPLIED PUTRESCINE EFFECTS ON ENDOGENOUS IAA IN KIDNEY BEAN AND PEA UNDER LOW-TEMPERATURE STRESS</b>	
Jurga JANKAUSKIENĖ, Sigita JURKONIENĖ, Virgilija GAVELIENĖ, Rima MOCKEVIČIŪTĖ, Elžbieta JANKOVSKA-BORTKEVIČ, Dessislava TODOROVA, Iskren SERGIEV .....	327
<b>EFFECT OF DIFFERENT RAW MATERIALS POWDER ON TEXTURE AND COLOUR PROPERTIES OF YOGURT BITES</b>	
Jurgita KULAITIENĖ, Nijolė VAITKEVIČIENĖ, Dovilė LEVICKIENĖ.....	328
<b>CHANGES IN FRUIT SIZE AND BIOCHEMICAL COMPOSITION OF VIBURNUM OPULUS FRUITS DURING RIPENING</b>	
Remigijus DAUBARAS, Laima ČESONIENĖ, Pranas VIŠKELIS.....	329
<b>STUDIES ON THE DIVERSITY OF PHENOLIC COMPOUNDS IN ACTINIDIA KOLOMIKTA BERRIES</b>	
Laima ČESONIENĖ, Mindaugas LIAUDANSKAS, Vaidotas ŽVIKAS, Remigijus DAUBARAS	330
<b>The EFFECT OF DRYING TECHNOLOGIES ON THE Quality of Dried Beetroot powder</b>	
Živilė TARASEVIČIENĖ, Aura DEGIMIENĖ, Aurelija PAULAUSKIENĖ, Judita ČERNIAUSKIENĖ.....	331
<b>RADIOACTIVITY LEVELS IN SOME MUSHROOM SPECIES COLLECTED FROM MACEDONIA AND CONSEQUENT DOSES</b>	

Angeleska ALEKSANDRA, Radmila CRCEVA NIKOLOVSKA, Elizabeta DIMITRIESKA STOJKOVIK, Katerina BLAGOEVSKA, Biljana DIMZOSKA STOJANOVSKA, Risto UZUNOV, Vasilka POPOSKA TRENEVSKA.....	332
<b>RADIATION LEVELS IN SAMPLES OF DICALCIUM PHOSPHATE (DCP) WITH A GAMMA SPECTROMETRY METHOD</b>	
Angeleska ALEKSANDRA, Radmila CRCEVA NIKOLOVSKA, Katerina BLAGOEVSKA, Elizabeta DIMITRIESKA STOJKOVIK, Biljana DIMZOSKA STOJANOVSKA, Risto UZUNOV .....	333
<b>VARIABLE COMPONENTS DETERMINING THE PRIMARY RESISTANCE TO EXTREME TEMPERATURES OF THE WHEAT SEEDS REPRODUCED IN DIFFERENT CLIMATIC ZONE</b>	
Alexandru DASCALIUC, Tudor RALEA, Nina ZDIORUC.....	334
<b><i>BACILLUS AMYLOLIQUEFACIENS</i> I3: AN EFFECTIVE BIOCONTROL AGENT IN THE INDUCTION OF SYSTEMIC RESISTANCE IN <i>ARABIDOPSIS THALIANA</i></b>	
Ilham BARAKAT, Nouredine CHTAINA, Philippe GRAPPIN, Mohammed EL GUILLI, Brahim EZZAHIRI, Sophie ALIGON, Martine NEVEU, Muriel MARCHI.....	335
<b>INTERFERENCE COMPETITION BETWEEN LADYBIRD BEETLE ADULTS (COLEOPTERA: COCCINELLIDAE) ON PRICKLY PEAR CACTI PEST <i>DACTYLOPIUS OPUNTIAE</i> (HEMIPTERA: DACTYLOPIIDAE)</b>	
Mohamed EL AALAOUI, Mohamed SBAGHI .....	336
<b>EVALUATION OF QUALITY AND SHELF-LIFE OF FRESH AND FLESHY CUCUMBER STORED IN CHARCOAL COOLER BIN IN THE TROPICS</b>	
Emmanuel EZECHINYELU, Chukwuemeka OHAGWU.....	337
<b>CHITOSAN MEDIATED IMPROVEMENTS IN OSMOSIS AND METABOLITES OF HEAT STRESSED COTTON</b>	
Abdul SHAKOOR, Muhammad FARRUKH SALEEM, Muhammad SHAHID, Muhammad SARWAR, Kent OLIVER BURKEY, Muhammad ASHFAQ WAHID, Ali RAZA .....	338
<b>BIOLOGICAL CONTROL OF FUSARIUM WILT OF TOMATO BY APPLICATION OF <i>PENICILLIUM</i> SPP. AND <i>CHENOPODIUM MURALE</i></b>	
Arshad JAVAID, Syeda FAKEHHA NAQVI, Amna SHOAI B, Iqra HAIDER KHAN.....	339
<b>FUNGI TOXIC PROPERTIES OF FOUR QUINOA VARIETIES LEAF EXTRACT AGAINST <i>MACROPHOMINA PHASEOLINA</i></b>	
Iqra HAIDER KHAN, Arshad JAVAID.....	340
<b><i>IN VITRO</i> PROFILING OF ASSOCIATED MYCOFLORA WITH ANTHRACNOSE OF MANGO INCITED BY <i>COLLETOTRICHUM</i> SPP, ITS MANAGEMENT AND DEVELOPMENT OF MODEL</b>	
Muhammad NASIR SUBHANI, Talha MANSOOR, Ahmed ALI SHAHID, Muhammad ALI, Muhammad TARIQ MALIK, Syed ATIF HASSAN NAQVI.....	341

<b>MODELLING OF UNSTEADY SPATIALLY DISTRIBUTED FOOD DRYING PARAMETERS ASSESSED NON-DESTRUCTIVELY (FOOD IMAGING) IN A SMALL INDUSTRIAL FOOD DRYER</b>	
Waseem AMJAD, Anjum MUNIR.....	342
<b>EXTARCTS FROM LAMIUM ALBUM AS A NATURAL SOURCE OF BIOACTIVE COMPOUNDS – ALTERNATIVE TO CHEMICAL CROPS PROTECTION</b>	
Pascaline Aimee UWINEZA, Marcin BRYŁA, Agnieszka WAŚKIEWICZ .....	343
<b>YIELD AND QUALITY OF TVAROG MADE FROM THE MILK OF SIMMENTAL COWS DEPENDING ON THE MILK PRODUCTION SEASON</b>	
Jolanta KRÓL, Aneta BRODZIAK, Magdalena STOBIECKA, Joanna WAJS.....	344
<b>THE INFLUENCE OF POLYOLS USED AS OSMOTIC AGENTS IN OSMOTIC DEHYDRATION PROCESS</b>	
Magdalena CHĄDZYŃSKA, Malgorzata NOWACKA .....	345
<b>FOOD SAFETY AND NUTRITIONAL PROPERTIES OF SOME EDIBLE MUSHROOMS</b>	
Lavinia BURULEANU, Andreea Antonia GEORGESCU, Cristiana RADULESCU, Ioana Daniela DULAMA, Claudia STIHI.....	346
<b>ENTOMOPATHOGENIC EFFECT OF SOME <i>BEAUVERIA</i> ISOLATES ON THE TOMATO LEAF MINER <i>TUTA ABSOLUTA</i> (LEPIDOPTERA: GELECHIIDAE) LARVAE UNDER LABORATORY CONDITIONS</b>	
Maria IAMANDEI, Ana-Cristina FATU, Madalina RADULEA, Ioan ROSCA.....	347
<b>THE INFLUENCE OF THE ESSENTIAL AMINO ACIDS IN CEREALS ON THE NUTRITIONAL QUALITY OF FOOD</b>	
Steluta RADU .....	348
<b>DIFFERENTIATED HERBICIDES APPLICATION ON WINTER WHEAT CROPS USING OFFLINE INSTRUCTIONS MAP</b>	
Dmitrii S. FOMIN, Denis S. FOMIN .....	349
<b>THE USE OF POTASSIUM SALTS UNIQUE PROPERTIES FOR SUPPRESSION OF POTATO PATHOGENS DURING STORAGE PERIOD</b>	
Alexey G. ISAEVICH, Alexander Y. MAKSIMOV, Konstantin N. KORLYAKOV, Dmitriy A. POSPELOV, Lubov' G. TSEMA, Anna L. LATYPOVA, Nikita V. ZUBOV .....	350
<b>THE NEW RACES OF <i>PUCCINIA HELIANTHI</i> SCHWEIN ON SUNFLOWER IN THE RUSSIAN FEDERATION</b>	
Nina ARASLANOVA, Tatiana ANTONOVA, Ekaterina LEPESHKO, Tatiana USATENKO, Svetlana SAUKOVA, Maria IWEBOR, Yulya PITINOVA.....	351
<b>INVASIVE INSECT SPECIES IMPORTANCE AND POSSIBLE PATHWAYS OF THEIR SPREADING IN SERBIA</b>	

Aleksandra KONJEVIC, Željko MILOVAC, Svetlana KONTSEDALOV, Surapathrudu KANAKALA, Murad GHANIM, Tara GARIEPY, Dmitry MUSOLIN.....	352
<b>CONTROL OF ELATERIDAE AND <i>GRYLLOTALPA GRYLLOTALPA</i> IN THE TOMATO CROPS</b>	
Slavica VUKOVIĆ, Sanja LAZIĆ, Dragana ŠUNJKA, Antonije ŽUNIĆ, Dragana BOŠKOVIĆ, Aleksandra ALAVANJA .....	353
<b>OCCURRENCE OF OCHRATOXIN A IN RED WINE IN SERBIA IN 2020-2021</b>	
Marko M. JAUKOVIĆ, Anja D. VUKSAN .....	354
<b>DISSIPATION DYNAMICS OF ANTHRANILIC DIAMIDE INSECTICIDES IN SOME FRUITS</b>	
Sanja LAZIĆ, Dragana ŠUNJKA, Slavica VUKOVIĆ, Antonije ŽUNIĆ, Dragana BOŠKOVIĆ, Aleksandra ALAVANJA .....	355
<b>MICROBIOLOGICAL QUALITY OF SURFACE WATER AND SAFE VEGETABLE PRODUCTION</b>	
Igor KLJUJEV, Vera KARLIČIĆ, Jelena JOVIČIĆ-PETROVIĆ, Ana VELIČKOVIĆ, Blažo LALEVIĆ, Vera RAIČEVIĆ .....	356
<b>THE OVERVIEW ON THE FUMONISINS PRESENCE IN DURUM WHEAT GRAIN IN SERBIA DURING THE PERIOD 2015-2019</b>	
Iva SAVIĆ, Milica NIKOLIĆ, Vesna KANDIĆ, Milan STEVANOVIĆ, Slavica STANKOVIĆ...	357
<b>OVERVIEW OF MOLECULAR METHODS FOR DETECTION OF „<i>CANDIDATUS LIBERIBACTER SOLANACEARUM</i>”</b>	
Jelena MENKOVIĆ, Anđelka PROKIĆ, Milan IVANOVIĆ, Aleksa OBRADOVIĆ .....	358
<b>EFFECT OF MILIGARD IN CONTROL OF <i>Cercospora beticola</i></b>	
Jelena PERENČEVIĆ, Vladimir SABADOŠ, Mirjana Zorić, Gordana MRDAK, Tatjana VESELINOVIĆ .....	359
<b>THE PROGNOSIS OF <i>CYDIA POMONELLA</i> L.THE MOST SIGNIFICANT PESTS OF APPLES</b>	
Jelica ŽIVIĆ, Ivica STANČIĆ , Milić VOJINOVIĆ, Jugoslav TRAJKOVIĆ, Tijana ŽIVIĆ .....	360
<b>THE RESISTANCE OF AUTOCHTHONOUS VARIETIES OF APPLES AND PEARS ON <i>ERWINIA AMYLOVORA</i></b>	
Milić VOJINOVIĆ, Jelica ŽIVIĆ, Sanja PERIĆ, Slađana GOLUBOVIĆ, Ivica STANČIĆ, Dragana STANISAVLJEVIĆ.....	361
<b>ANTIFUNGAL ACTIVITY OF ESSENTIAL OILS ON <i>ASPERGILLUS FLAVUS</i> ORIGINATING FROM MAIZE KERNELS</b>	
Milica NIKOLIĆ, Iva SAVIĆ, Ksenija RADOTIĆ, Slobodan KRNJAJIĆ, Dragana BARTOLIĆ, Milan STEVANOVIĆ, Slavica STANKOVIĆ .....	362
<b>EFFECT OF 1-METHYLCYCLOPROPENE ON STORAGE OF PEAR 'WILLIAMS'</b>	

Mira MILINKOVIĆ, Svetlana M. PAUNOVIĆ, Jelena TOMIĆ, Dragana VRANIĆ .....	363
<b>INFLUENCE OF SULFUR DIOXIDE AND ASCORBIC ACID ON PHENOLIC ACIDS IN CABERNET SAUVIGNON WINE</b>	
Nikolina LISOV, Ivana PLAVŠIĆ, Aleksandar PETROVIĆ, Ljiljana GOJKOVIĆ BUKARICA..	364
<b>INFLUENCE OF REFINING PROCESS ON MYCOTOXIN CONTENT IN VEGETABLE OILS AND FATS</b>	
Ranko ROMANIĆ, Sunčica KOCIĆ TANACKOV, Tanja LUŽAIĆ, Jelena KUCURSKI .....	365
<b>COLOR CHARACTERISTIC OF NON-REFINED OILS OBTAINED BY COLD PRESSING OF THE SEEDS OILS OBTAINED FROM CONFECTIONARY SUNFLOWER HYBRIDS</b>	
Ranko ROMANIĆ, Tanja LUŽAIĆ, Nada GRAHOVAC, Nada HLADNI, Snežana KRAVIĆ, Zorica STOJANOVIĆ .....	366
<b>EFFICACY OF FUNGICIDES IN CONTROL OF CHERRY PATHOGEN <i>MONILINIA LAXA</i> (ADER. and RUHL.)</b>	
Sanja PERIC, Jugoslav TRAJKOVIC, Sladjana GOLUBOVIC, Milic VOJINOVIC, Jelica ZIVIC	367
<b>MORPHOLOGICAL CHARACTERISTICS OF <i>EUTYPA LATA</i> ISOLATES FROM GRAPEVINE IN SERBIA</b>	
Sanja ŽIVKOVIĆ, Tanja VASIĆ, Darko JEVREMOVIĆ, Vojislav TRKULJA .....	368
<b>IDENTIFICATION OF MYCOPOPULATION ON AMERICAN Highbush BLUEBERRY IN SERBIA</b>	
Sanja ŽIVKOVIĆ, Tanja VASIĆ, Darko JEVREMOVIĆ, Aleksandar LEPOSAVIĆ .....	369
<b>OCCURRENCE OF POWDERY MILDEW AND SEPTORIA LEAF BLOTCH IN WHEAT AFFECTED BY NITROGEN DOSE AND FOLIAR FERTILIZATION</b>	
Slaviša GUDŽIĆ, Nebojša DELETIĆ, Nebojša GUDŽIĆ, Miroljub AKSIĆ, Katerina NIKOLIĆ, Milosav GRČAK, Dragan GRČAK .....	370
<b>SWEET CORN AS FUNCTIONAL FOOD</b>	
Snežana MLADENOVIĆ DRINIĆ, Jelena VUKADINOVIĆ, Tomislav TOSTI, Jelena SRDIĆ, Ana NIKOLIĆ, Violeta ANĐELKOVIĆ, Dušanka MILOJKOVIĆ-OPSENICA .....	371
<b>EFFECT OF SOIL MANAGEMENT SYSTEMS ON THE GENERATIVE POTENTIAL AND FRUIT QUALITY OF BLACK CHOKEBERRY</b>	
Svetlana M. PAUNOVIĆ, Mira MILINKOVIĆ, Žaklina KARAKLAJIĆ-STAJIĆ, Jelena TOMIĆ, Boris RILAK .....	372
<b>MORPHOLOGICAL CHARACTERISTICS OF <i>EUTYPALATA</i> ISOLATES FROM GRAPEVINE IN SERBIA</b>	
Sanja ŽIVKOVIĆ <sup>1</sup> , Tanja VASIĆ <sup>1</sup> , Darko JEVREMOVIĆ, Vojislav TRKULJA .....	373
<b>IDENTIFICATION OF MYCOPOPULATION ON AMERICAN Highbush BLUEBERRY IN SERBIA</b>	
Sanja ŽIVKOVIĆ, Tanja VASIĆ, Darko JEVREMOVIĆ, Aleksandar LEPOSAVIĆ .....	374

<b>COLOUR STABILITY OF CYANIDIN IN SLIGHTLY ACIDIC SOLUTION</b> Violeta RAKIĆ, Vojkan MILJKOVIĆ, Milena MILJKOVIĆ, Nataša POKLAR ULRIH.....	375
<b>INFLUENCE OF DIFFERENT DENSITIES DURING SOWING ON BUCKWHEAT (<i>FAGOPIRUM ESCULENTUM L.</i>) YIELD AS A SUBSEQUENT IN AGRICULTURE</b> Vladimir SABADOŠ, Danijela ŽUNIĆ, Zoran BOCA .....	376
<b>POD DAMAGE MONITORING IN OILSEED RAPE IN VOJVODINA</b> Željko MILOVAC, Filip FRANETA, Ana MARJANOVIĆ JEROMELA, Petar MITROVIĆ .....	377
<b>EFFECT OF A BIOSURFACTANT EXTRACTED FROM CORN STEEP LIQUOR ON THE UPTAKE OF COPPER OXYCHLORIDE BY <i>BOTRYTIS CINEREA</i> CELLS</b> Alejandro LÓPEZ-PRIETO, Benita PÉREZ CID, Ana Belén MOLDES, José Manuel CRUZ.....	378
<b>EFFECTS OF SOME INSECTICIDES ON THREE INSECT PREDATORS IN THE SUDAN</b> Hayder ABDELGADER.....	379
<b>EVALUATION OF PSEUDOMONAS AND RHIZOBIACEAE SPP. INOCULATION ON THE GROWTH AND NODULATION OF THE HYACINTH BEAN (<i>LABLAB PURPUREUS</i>)</b> Camille BROQUET, Lucas ARMINJON, Romain CHABLAIS, Bastien COCHARD, Julien CROVADORE, Pierre-Yves BOVIGNY, François LEFORT .....	380
<b>MICROBIOLOGICAL CONTROL OF <i>VARROA DESTRUCTOR</i>: EFFICACY ASSAYS OF ENTOMOPATHOGENIC FUNGI</b> Céline CORBEX, Corentin DESCOMBES, Ciril SCHULZ, Bastien COCHARD, Martine HAENZI, Romain CHABLAIS, Julien CROVADORE, Pierre-Yves BOVIGNY, Jochen PFLUGFELDER, François LEFORT .....	381
<b>MICROBIOLOGICAL CONTROL OF <i>VARROA DESTRUCTOR</i>: SELECTION AND EVALUATION OF POTENTIALLY ENTOMOPATHOGENIC MICROORGANISMS</b> Corentin DESCOMBES, Ciril SCHULZ, Bastien COCHARD, Martine HAENZI, Romain CHABLAIS, Julien CROVADORE, Pierre-Yves BOVIGNY, Jochen PLUGFELDER, François LEFORT .....	382
<b>LINKING RESPONSE TO SHADE WITH GROWTH AND YIELD IN SEVERAL COFFEE AGROFORESTRY SYSTEMS IN ECUADORIAN AMAZONIA</b> Kevin PIATO, Cristian SUBÍA, Lindsey NORGRÖVE, François LEFORT .....	383
<b>EVALUATION OF BACTERIAL BIOSTIMULANTS ON THE GROWTH AND FLOWER PRODUCTION OF <i>CANNABIS SATIVA L.</i></b> Leonardo PIVA, Bastien COCHARD, Romain CHABLAIS, Julien CROVADORE, Pierre-Yves BOVIGNY, François LEFORT .....	384
<b>AGROECOLOGICAL PROPOSALS FOR ORGANIC VEGETABLE PRODUCTIONS AT A SMALL FARM IN GENEVA</b> Zsolt MAURER, Julian TUGWELL, Pierre-Yves BOVIGNY, François LEFORT .....	385

<b>FIRST RECORD OF CIRCULAR LEAF-MINER LEUCOPTERA SCITELLA ZELL. ON SEVERAL HOSTS IN SYRIA</b>	
Nesrin DIAB, Ebraheem AL-JOURI, Adel ALMANOUFI .....	386
<b>FIRST RECORD OF THE GENUS <i>GLYPTAPANTELES</i> ASHMEAD, 1904 (BRACONIDAE:MICROGASTRINAE) ON LARVAE OF TOMATO LEAF MINER <i>TUTA ABSOLUTE</i> (MEYRICK, 1917) IN SYRIA</b>	
Rawa MUHSEN YOUSSEF, Nabil HASAN ABO KAF, Rafeek ABOUD.....	387
<b>BIOPROTECTION OF CUCUMIS MELO FROM <i>ALTERNARIA</i> LEAF SPOT BY <i>GLOMUS MOSSEAE</i> AND <i>TRICHODERMA HARZIANUM</i></b>	
Abdulnabi Abdul Ameer MATROOD, Abdelhak RHOUMA.....	388
<b>EFFICACY OF FUNGICIDES FOR CONTROL OF POWDERY MILDEW ON GRAPEVINES IN CHOTT SIDI ABDEL SALAM OASIS, TUNISIA</b>	
Abdelhak RHOUMA, Mohammad Imad KHRIEBA, Abdulnabi Abdul Ameer MATROOD .....	389
<b>ISOLATION AND IDENTIFICATION OF ARBUSCULAR MYCORRHIZAL FUNGI ASSOCIATED WITH <i>ZEA MAYS</i> L. IN THE SYRIAN COAST</b>	
Mohammad Imad KHRIEBA, Abdelhak RHOUMA .....	390
<b>THE BLACK PARLATORIA SCALE <i>PARLATORIA ZIZIPHI</i> (LUCAS, 1853) (HEMIPTERA: COCCOMPORHA: DIASPIDIDAE): BIOLOGY, CONTROL OPTIONS AND PEST MANAGEMENT APPROACH.</b>	
Hanen JENDOUBI, Pompeo SUMA .....	391
<b>PEST STATUS OF THE BLACK PARLATORIA SCALE <i>PARLATORIA ZIZIPHI</i> (LUCAS, 1853) (HEMIPTERA: COCCOMPORHA: DIASPIDIDAE)</b>	
Hanen JENDOUBI, Pompeo SUMA .....	392
<b>INFLUENCE OF ROASTED AND UNROASTED TREATMENTS ON THE FUNCTIONAL PROPERTIES OF WHOLE DURUM WHEAT HARVESTED UNDER TWO TILLAGE SYSTEMS</b>	
Imene KERBOUAI, Khaled SASSI, Hanen BEN ISMAIL.....	393
<b>BIOCONTROL OF <i>RHIZOCTONIA SOLANI</i> USING VOLATILE ORGANIC COMPOUNDS OF SOLANACEAE SEED-BORNE ENDOPHYTIC BACTERIA</b>	
Takwa MARZOUK, Manel CHOUACHI, Ayushi SHARMA, Selim JALLOULI, Ridha MHAMDI, Nutan KAUSHIK, Naceur DJÉBALI .....	394
<b>LONG-TERM EFFECT OF NEMATICIDAL (ETHOPROPHOS) AND BIOLOGICAL (NOVIBIO) TREATMENTS ON SOIL MICROORGANISM BALANCE</b>	
Najoua NAMOUCHI-KACHOURI, Mohamed Mouldi B'CHIR .....	395
<b>ON FARM TRIALS CONFIRMING NOVIBIO EFFICACY COMPARED WITH VYDATE ON TOMATO INFESTED BY MELOIDOGYNE JAVANICA</b>	
Najoua NAMOUCHI-KACHOURI, M. M. B'CHIR .....	396

<b>OPTIMIZATION AND VALIDATION OF MULTI-RESIDUE LC-MSMS METHOD FOR THE ANALYSIS OF PESTICIDES IN CHESNUT</b>	
Gulden HAZARHUN, Aysegul YILDIRIM KUMRAL.....	397
<b>DETERMINATION OF ANTIFUNGAL ACTIVITIES OF WOOD VINEGAR OBTAINED FROM ECALYPTUS AGAINST TOMATO ROOT-ROT AND WILT DISEASE AGENTS</b>	
Aysun UYSAL, Soner SOYLU, Şener KURT, Merve KARA, Emine Mine SOYLU.....	398
<b>THE CHEMICAL CONTROL OF BACTERIAL CANKER ON CHERRY</b>	
Cansu OKSEL, Mustafa MİRİK .....	399
<b>AGRICULTURAL PRODUCTS GRADING METHODS AND THEIR ASSOCIATED CHALLENGES</b>	
Geofrey Prudence BAITU, Yeşim Benal ÖZTEKİN, Hüseyin DURAN, Alper TANER.....	400
<b>TECHNOLOGICAL INNOVATIONS IN PESTICIDE APPLICATIONS</b>	
Özbay AKKAŞ, Hüseyin DURAN .....	401
<b>IMPACT OF MACHINE LEARNING IN AGRICULTURAL RESEARCH</b>	
Mahtem T. MENGSTU, Alper TANER, Yeşim Benal ÖZTEKİN, Hüseyin DURAN.....	402
<b>EXTRACTION METHODS, COMPOSITION AND BIOACTIVE PROPERTIES OF SOME MEDICINAL AND AROMATIC PLANT ESSENTIAL OILS</b>	
Mehmet Musa ÖZCAN, Nurhan USLU .....	403
<b>ENHANCEMENT OF OXIDATIVE QUALITY OF HEAT TREATED FERMENTED SAUSAGES BY BARBERRY (<i>BERBERIS VULGARIS</i> L.) EXTRACT</b>	
Hülya Serpil KAVUŞAN, Burcu SARI, Hilal CAN, Fatih Mehmet YILMAZ, Meltem SERDAROĞLU.....	404
<b>CHEMICAL COMPOSITION AND ANTIBACTERIAL ACTIVITY OF ESSENTIAL OIL OF MINT PLANT AGAINST SEED-BORNE BACTERIAL DISEASE AGENTS</b>	
Merve KARA, Soner SOYLU, Musa TÜRKMEN.....	405
<b>ISOLATION AND IDENTIFICATION OF PUTATIVE PLANT GROWTH PROMOTING BACTERIAL SPECIES FROM <i>DATURA INOXIA</i> MILL. GROWING IN TURKEY</b>	
Merve KARA, Soner SOYLU, İlhan ÜREMİŞ, Aysun UYSAL, Şener KURT, Emine Mine SOYLU .....	406
<b>IDENTIFICATION OF <i>XANTHOMONAS CAMPESTRIS</i> PV. <i>CAMPESTRIS</i> ISOLATES CAUSING DISEASE ON CABBAGE IN NİĞDE PROVINCE OF TURKEY</b>	
Murat ÖZTÜRK, Soner SOYLU .....	407
<b>REMOTE SENSING AND GIS IN AGRICULTURAL PEST INSECT MONITORING: THE STATE OF THE ART IN TURKEY</b>	
Mustafa YAMAN, Şule YAMAN .....	408



<b>PROTIST PATHOGENS OF INDIAN MEAL MOTH <i>Plodia interpunctella</i> (LEPIDOPTERA: PYRALIDAE) IN TURKEY</b>	
Mustafa YAMAN, Tuğba SAĞLAM, Ömer ERTÜRK .....	409
<b>EVALUATION OF POPULATION DENSITY OF DIAMOND BACK MOTH, <i>PLUTELLA XYLOSTELLA</i> (L.) (LEPIDOPTERA: YPONOMEUTIDAE) ON CANOLA PLANTS IN HATAY PROVINCE OF TURKEY</b>	
Nihat DEMİREL .....	410
<b>EVALUATION OF THE DAMAGE RATES OF LEOPARD MOTH, <i>ZEUZERA PYRINA</i> L. (LEPIDOPTERA: COSSIDAE) ON DIFFERENT OLIVE VARIETIES IN TURKEY</b>	
Nihat DEMİREL .....	411
<b>SEASONAL ABUNDANCE OF <i>EMPOASCA DECIPIENS</i> (PAOLI) AND <i>ASYMMETRASCA DECEDENS</i> (PAOLI), (HEMIPTERA: CICADELLIDAE) ON COTTON PLANTS IN AMIK PLAIN OF HATAY PROVINCE</b>	
Nihat DEMİREL .....	412
<b>SİDE EFFECTS OF SOME ESSENTIAL OİLS ON <i>TUTA ABSOLUTA</i> (MEYRİCK, 1917) (LEPIDOPTERA, GELECHİİDAE) LARVAE UNDER LABORATORY CONDITIONS</b>	
Buğse TAŞKIRANOĞULLARI, Nimet SEMA GENÇER .....	413
<b>APPLICATION OF MACHINE VISION AND IMAGE PROCESSING TECHNIQUES IN ASSESSING THE QUALITY OF NUT PRODUCTS</b>	
Omsalma Alsadig Adam GADALLA, Yeşim Benal ÖZTEKİN, Alper TANER, Hüseyin DURAN	414
<b>DETERMINATION OF SOME PESTICIDE RESIDUES IN FOUR SPECIES OF <i>APIACEAE</i> FAMILY</b>	
Sema DEMİR, Mihriban KORUKLUOĞLU.....	415
<b>DETERMINATION OF ESSENTIAL OIL COMPONENTS, MINERAL MATTER, AND HEAVY METAL OF CLARY SAGE (<i>SALVIA SCLAREA</i> L.) COLLECTED FROM CENTRAL ANATOLIA IN TURKEY</b>	
Tansu USKUTOĞLU, Belgin COŞGE ŞENKAL, Hülya DOĞAN .....	416
<b>PHYLOGENETIC ANALYSIS OF TWO UKRAINIAN ISOLATES OF CUCUMBER MOSAIC VIRUS FROM GLADIOLI GROWN UNDER DIFFERENT AGROECOLOGICAL CONDITIONS</b>	
Roksolana SOVINSKA, Alina DUNICH, Lidiya MISHCHENKO .....	417
<b>3. ORGANIC AGRICULTURE.....</b>	<b>418</b>
<b>CHEMICAL-PHYSICAL PROPERTIES AND QUALITY OF HONEY FROM ORGANIC GROWING FROM THE AREA OF SOUTHERN HERZEGOVINA</b>	
Alma LETO, Belmana GERIN, Alma MIČIJEVIĆ, Svetlana HADŽIĆ, Alisa HADŽIABULIĆ, Aida ŠUKALIĆ .....	419

<b>CHEMICAL COMPOSITION OF MEDLAR (<i>MESPILUS GERMANICA</i>) AND WILD SERVICE TREE (<i>SORBUS TORMINALIS</i>) – UNDERUTILIZED EDIBLE FRUITS FROM BOSNIA AND HERZEGOVINA</b> Srđan LJUBOJEVIĆ, Ladislav VASILIŠIN, Goran VUČIĆ, Ana VELEMIR .....	420
<b>CHEMICAL COMPOSITION OF YELLOW GENTIAN ROOT (<i>GENTIANAE RADIX</i>) FROM BOSNIA AND HERZEGOVINA</b> Srđan LJUBOJEVIĆ, Ladislav VASILIŠIN, Goran VUČIĆ, Ana VELEMIR .....	421
<b>CHICKPEAS AS A VALUABLE RAW MATERIAL IN FULFILLMENT OF THE GOALS OF THE BIOECONOMY</b> Daniela TSVYATKOVA, Angel SAROV .....	422
<b>FUTURE TRENDS FOR DEVELOPMENT OF ORGANIC VINE AND WINE IN BULGARIA</b> Desislava TOTEVA .....	423
<b>COMPARISON OF THE ANTIBACTERIAL POWER OF RAVINTSARA ESSENTIAL OIL (<i>CINNAMOMUM CAMPHORA</i>) IN RELATION TO ITS ORGANIC CERTIFICATION OR CONVENTIONAL</b> LAVILLEJ, C. HOTTELART, V. TOUSSAINT, T. FAUDEMÉR, Alex GLINEUR, Steven MASCREZ, Ludovic ANDRES.....	424
<b>SHORT AND LONG TERM EFFECTS OF DIGESTATE FERTILIZATION ON NITROUS OXIDE EMISSIONS IN A FIELD EXPERIMENT IN SOUTHERN GERMANY</b> Felizitas WINKHART, Harald SCHMID, Kurt-Jürgen HÜLSBERGEN .....	425
<b>INNOVATIVE COMBINE HARVESTING AS AN APPROACH FOR INTEGRATED NON-CHEMICAL WEED CONTROL IN CENTRAL HESSEN/ GERMANY</b> Philipp KÖLLMANN .....	426
<b>NITROGEN BALANCES OF DIFFERENT ORGANIC AND CONVENTIONAL FARMING SYSTEMS – RESULTS OF A LONG-TERM EXPERIMENT IN SOUTHERN GERMANY</b> Thomas MÖSL, Harald SCHMID, Kurt-Jürgen HÜLSBERGEN.....	427
<b>OENOLOGICAL CHARACTERISTICS AND VINIFICATION RESULTS OF THE YEAST OF MALAGOUSIA GRAPE ISOLATED IN GREECE</b> Aikaterini KARAMPATEA, Argirios TSAKIRIS, Ioannis KOURKOUTAS .....	428
<b>ROLE OF RHIZOBACTERIA IN PLANT DEFENSE SYSTEM</b> Riyaz Z. SAYYED.....	429
<b>HALOTOLERANT MICROBIAL CONSORTIA FOR SUSTAINABLE MITIGATION OF SALINITY STRESS; GROWTH PROMOTION, AND MINERAL UPTAKE IN PLANT AND SOIL NUTRIENT ENRICHMENT</b> Riyaz Z. SAYYED.....	430

<b>ACILLIBACTIN : A NEW TYPE OF SIDEROPHORE FOR IMPROVEMENT IN PLANT GROWTH AND OIL CONTENT IN SESAME</b>	
Riyaz Z. SAYYED, Sundaram LALITHA, M. S. REDDY .....	431
<b>INTERLINKING BIO-PRIMING APPROACH WITH INTEGRATED NUTRIENT MANAGEMENT FOR IMPROVED NUTRIENT USE EFFICIENCY IN CROP SPECIES</b>	
Riyaz Z. SAYYED.....	432
<b>EFFECT OF EXOGENOUS PUTRESCINE ON WINTER OILSEED RAPE RESPONSE TO LOW TEMPERATURE</b>	
Elžbieta JANKOVSKA-BORTKEVIČ, Sigita JURKONIENĖ, Virgilija GAVELIENĖ, Rima MOCKEVIČIŪTĖ, Jurga JANKAUSKIENĖ, Dessislava TODOROVA, Iskren SERGIEV, Valdas VILUCKAS, Petras PRAKAS .....	433
<b>EFFECT OF PROBIOTIC COMPOSITIONS ON GROWTH, ANTIOXIDANT ACTIVITY AND PRODUCTIVITY OF BEETROOT</b>	
Božena ŠOČIK, Sigita JURKONIENĖ, Virgilija GAVELIENĖ, Elžbieta JANKOVSKA-BORTKEVIČ.....	434
<b>EFFECTS INDUCED BY THE PROBIOTICS ON ANTIOXIDANT POTENTIAL OF BLACKCURRANT BERRIES</b>	
Sigita JURKONIENĖ, Virgilija GAVELIENĖ, Rima MOCKEVIČIŪTĖ, Jurga JANKAUSKIENĖ, Elžbieta JANKOVSKA-BORTKEVIČ, Vaidevutis ŠVEIKAUSKAS.....	435
<b>ORGANIC AGRICULTURE FOR ECOLOGICAL BALANCE: THE CASE STUDY OF NEPAL</b>	
Megha RAJ REGMI.....	436
<b>RESPONSE OF GROUNDNUT TO RHIZOBIUM INOCULATION IN TWO AGRO ECOLOGICAL ZONES OF NORTHERN NIGERIAN SAVANNAH</b>	
Abdulkadir N. A., Ewusi-Mensah, N., Opuko , A. , Yusuf A. A, Malamine Thioub , Adamu, U. K. , Almu, H., Sani, A. , Muhammad, A. A., Hayatu, B. Ahmad, U. B, Lamido, A. K. Adam, I., Aliyu, R. W., Jibrin H. J. ....	437
<b>NITROGEN TRANSFORMATIONS AND MAIZE GROWTH IN RESPONSE TO NITRIFICATION INHIBITORS AND PEANUT STRAW BIOCHAR</b>	
Khalid MEHMOOD, Majid MAHMOOD TAHIR, Muhammad AQEEL KAMRAN, M. ABDULAHA-AL BAQUY, Ren-yong SHI, Ren-kou XU.....	438
<b>CYANOBACTERIA-PLANT INTERACTION: ASSOCIATIVE NITROGEN FIXATION AND AUXIN PRODUCTION BY <i>LEPTOLYNGBYA</i> AND ENHANCED GROWTH OF <i>VIGNA RADIATA</i></b>	
Mehboob AHMED.....	439
<b>MYCORRHIZAL INOCULATION ENHANCED TILLERING IN FIELD GROWN WHEAT, NUTRITIONAL ENRICHMENT AND SOIL PROPERTIES</b>	

Muhammad AKBAR, Safeer Akbar CHOHAN, Nasim Ahmad YASIN, Aqeel AHMAD, Waheed AKRAM, Nazir ASLAM, Muhammad Sajjad IQBAL, Tayyaba KHALIL .....	440
<b>SOIL AND ITS MICROORGANISMS: A CASE STUDY FOR SUSTAINABLE AGRICULTURAL PRODUCTION UNDER PAKISTAN'S CLIMATIC CHANGE CONDITIONS</b>	
Noshin ILYAS .....	441
<b>CONTENT OF SELECTED ANTIOXIDANT COMPOUNDS IN RAW MILK PRODUCED ON A CERTIFIED ORGANIC FARM AND IN YOGHURT MADE FROM IT</b>	
Aneta BRODZIAK, Jolanta KRÓL, Joanna WAJS, Barbara TOPYŁA.....	442
<b>RESEARCH ON THE USE OF COVER CROPS FOR THE CONTROL OF DISEASES AND PESTS IN ORGANIC VINEYARDS</b>	
Aurora RANCA, Anamaria PETRESCU, Ionica DINA, Sergiu Ayar ENE, Victoria ARTEM.....	443
<b>VALORIZATION OF WINE AND MARINE BY-PRODUCTS AS POTENTIAL ORGANIC FERTILIZERS IN GRAPEVINE CULTURE</b>	
Victoria ARTEM, Aurora RANCA, Anil ABDURAMAN, Madalina-Andreea CIOCAN, Ticuta NEGREANU-PIRJOL.....	444
<b>HUMIC ACIDS COMPOSITION OF ARABLE SOD-PODZOLIC SOIL AFTER LONG-TERM APPLICATION OF TRADITIONAL AND UNCONVENTIONAL ORGANIC FERTILIZERS</b>	
Nina E. ZAVYALOVA, Marina T. VASBIEVA .....	445
<b>MODELING OF THE PRODUCTION PROCESS OF SPRING GRAIN CROPS TO IMPROVE ORGANIC PRODUCTION IN URBAN FARMING</b>	
Alexandrov NIKITA ALEXANDROVICH.....	446
<b>SMART LAND MANAGEMENT AND ORGANIC AGRICULTURE IN BELARUS</b>	
Vasily NILIPOVSKIY, Olga PISETSKAYA .....	447
<b>CHARACTERIZATION OF COLORED MAIZE SEED FRACTIONS USING FLUORESCENCE SPECTROSCOPY AND MULTIVARIATE ANALYSIS</b>	
Dragana BARTOLIĆ, Miloš PROKOPIJEVIĆ, Mira STANKOVIĆ, Ksenija RADOTIĆ .....	448
<b>THE STATE OF ORGANIC GRAIN PRODUCTION IN SERBIA</b>	
Jelena GOLIJAN, Mile SEČANSKI, Bojan DIMITRIJEVIĆ .....	449
<b>SOME INDICATORS OF ORGANIC PRODUCTS EXPORT FROM THE REPUBLIC OF SERBIA</b>	
Marija POPOVIĆ, Sreten JELIĆ .....	450
<b>THE INFLUENCE OF ORGANIC FERTILIZERS ON THE SEED YIELD AND SEED QUALITY OF BUTTERNUT SQUASH (<i>CUCURBITA MOSCHATA</i>) GROWN ON DIFFERENT TYPES OF SOIL</b>	

Milan UGRINOVIĆ, Zdenka GIREK, Suzana PAVLOVIĆ, Slađan ADŽIĆ, Jelena DAMNJANOVIĆ, Marija GAVRILOVIĆ, Vladan UGRENOVIĆ .....	451
<b>DRY BEAN PRODUCTION IN THE FIRST DECADES OF THE 21ST CENTURY: REPUBLIC OF SERBIA</b>	
Milan UGRINOVIĆ, Zdenka GIREK, Suzana PAVLOVIĆ, Slađan ADŽIĆ, Dejan CVIKIĆ, Đorđe MORAVČEVIĆ, Almir MUHOVIĆ .....	452
<b>THE IMPORTANCE OF APPLYING ORGANIC PREPARATIONS IN THE PEPPER PRODUCTION</b>	
Marina STANIĆ, Nenad PAVLOVIĆ, Jelena MLADENOVIĆ, Anđelka POPADIĆ, Milena ĐURIĆ .....	453
<b>THE INFLUENCE OF SOME BIO-PRODUCTS ON GERMINATION AND PROTECTION OF <i>CHAMOMILLA RECUTITA</i> (L.) RAUCH SEEDS</b>	
Vladimir FILIPOVIC, Sara MIKIC, Vladan UGRENOVIC, Tatjana MARKOVIC, Zeljana PRIJIC, Snezana MRĐAN, Stefan GORDANIC.....	454
<b>IS THERE ANY EFFECTS OF ORGANIC FOOD ON HUMAN HEALTH?</b>	
Snežana OLJAČA, Željko DOLIJANOVIĆ, Dušan KOVAČEVIĆ, Jasmina OLJAČA, Nemanja GRŠIĆ.....	455
<b>VARIABILITY OF PLANT HEIGHT AND SPIKE CHARACTERISTICS OF DURUM WHEAT GROWING IN ORGANIC PRODUCTIONS</b>	
Veselinka ZEČEVIĆ, Slobodan MILENKOVIĆ, Danica MIĆANOVIĆ, Kristina LUKOVIĆ, Mirela MATKOVIĆ STOJŠIN, Radiša ĐORĐEVIĆ, Desimir KNEŽEVIĆ .....	456
<b>EFFECT OF CROPPING SYSTEMS AND PLANT NUTRITION ON PRODUCTIVITY AND RHEOLOGICAL QUALITY OF WINTER WHEAT</b>	
Magdaléna LACKO-BARTOŠOVÁ, Lucia LACKO-BARTOŠOVÁ, Matej HUDEC, Joanna KORCZYK-SZABÓ .....	457
<b>PRODUCTION PARAMETERS AND ECONOMIC PERFORMANCE OF WINTER WHEAT GROWN IN ORGANIC SYSTEM</b>	
Magdaléna LACKO-BARTOŠOVÁ, Lucia LACKO-BARTOŠOVÁ, Matej HUDEC .....	458
<b>ALTERNATIVE FOR POLYPROPYLENE BAGS IN OYSTER MUSHROOM (<i>PLEUROTUS OSTREATUS</i>) CULTIVATION IN SRI LANKA.</b>	
I.J.A. RUHUNUGE, J. P. KIRTHISINGHE.....	459
<b>USE OF ANIMAL DUNG FOR CULTIVATION OF OYSTER MUSHROOM (<i>Pleurotus ostreatus</i>) IN SRI LANKA</b>	
I.J.A RUHUNUGE, JP KIRTHISINGHE.....	460
<b>ORGANIC FARMING AND POLICIES APPLIED IN TURKEY</b>	
Aybüke KAYA .....	461

#### **4. ENVIRONMENT PROTECTION AND NATURAL RESOURCES MANAGEMENT.....462**

##### **BIODIVERSITY OF THE ENTOMOFAUNA OF AN ORANGERY IN EL-DJOURHOURIA (EUCALYPTUS, ALGIERS)**

Ilham BENABBAS- SAHKI, Kamel HAMADI, Salaheddine DOUMANDJI ..... 463

##### **PARASITIC NEMATODES OF VEGETABLE CROPS IN SOME REGIONS OF MITIDJA (ALGERIA)**

Ilham BENABBAS- SAHKI, Kamel HAMADI, Faiza MARNICHE..... 464

##### **EFFECT OF FUNGAL TREATMENT BY SOLID STATE FERMENTATION ON THE NUTRITIONAL VALUE OF OLIVE POMACE**

Nabila BELHAMICHE, Alia AISSAT, Siham AZIBI ..... 465

##### **STUDY OF DROUGHT TREND AND ITS CORRELATION WITH NORMALIZED DIFFERENCE VEGETATION INDEX OVER SETIF REGION IN ALGERIA**

Tarek BOUREGAA ..... 466

##### **CSR STRATEGIES OF INVASIVE WEED FLORA IN VINEYARDS OF BOSNIA AND HERZEGOVINA**

Antonela MUSA, Danijela PETROVIĆ, Samir ĐUG , Helena BREKALO Ivan OSTOJIĆ..... 467

##### **TEMPORARY AND PERMANENT WET ZONES IN BOSNIA AND HERZEGOVINA**

Branislav DRAŠKOVIĆ, Aleksandar PONOSOV, Natalia ZHERNAKOVA ..... 468

##### **WEED FLORA OF ARABLE CROPS IN HERZEGOVINA REGION (BOSNIA AND HERZEGOVINA)**

Danijela PETROVIĆ, Mate BOBAN, Antonela MUSA, Helena BREKALO, Ivan OSTOJIĆ ..... 469

##### **PROMOTING THE APPLICATION OF SMART TECHNOLOGIES (CLOUD-BASED AND REMOTE SENSING) IN AGRICULTURAL WATER MANAGEMENT IN BOSNIA AND HERZEGOVINA**

Mihajlo MARKOVIĆ, Nataša ČEREKOVIĆ, Đurađ HAJDER, Nery ZAPATA, Teresa A. PAÇO,  
Erminio EFISIO RIEZZO, Sabrija ČADRO, Mladen TODOROVIĆ ..... 470

##### **ANTIBACTERIAL ACTIVITY OF MANUKA HONEY WITH DIFFERENT MANUKA FACTOR**

Vesna KALABA, Tanja ILIĆ, Željko SLADOJEVIĆ, Bojan GOLIC ..... 471

##### **ANTIMICROBIAL PROPERTIS OF ESSENCIAL OILS AGAINST ESCHERICHIA COLI**

Vesna KALABA, Tanja ILIĆ, Željka MARJANOVIĆ BALABAN..... 472

##### **THE BULGARIAN MODEL OF LAND OWNERSHIP: THE "WHITE SPACE" PHENOMENON**

Diana KOPEVA, Angel SAROV..... 473

**PLANT HEALTH FOR LOCAL CLIMATE REGULATION IN URBAN AREAS IN THE EASTERN RHODOPES**

Stelian DIMITROV, Bilyana BORISOVA, Miglena ZHIYANSKI, Georgi GEORGIEV, Margarita GEORGIEVA, Martin ILIEV, Lidia SEMERDJIEVA, Kalina RADEVA ..... 474

**RESPONSE OF YIELD AND QUALITY OF TOMATO GROWN IN UNHEATED GREENHOUSE TO IRRIGATION AND FERTILIZATION WITH DIFFERENT RATES**

Galina PATAMANSKA, Ivanka MITOVA, Daniela MITEVA, Antoaneta GIGOVA..... 475

**ANALYSIS AND ASSESSMENT OF THE STATE OF BURGAS URBAN ECOSYSTEMS (BULGARIA) TO MAINTAIN NURSERY POPULATIONS AND HABITATS**

Lidiya SEMERDZHIEVA, Bilyana BORISSOVA ..... 476

**ASSESMENT OF THE DIVERSITY AND DISTRIBUTION OF HONEY PLANTS BY HABITATS IN THE CENTRAL PARTS OF KRIVODOL MUNICIPLAITY (NORHERN BULGARIA)**

Nikolay NIKOLOV, Borislav GRIGOROV, Kiril VASSILEV, Momchil NAZUROV ..... 477

**OVERVIEW AND PACKAGE ACTIVITIES PERFORMED OF NATIONAL RESEARCH PROGRAM "ENVIRONMENTAL PROTECTION AND REDUCTION OF ADVERSE EVENTS AND NATURAL DISASTERS' RISKS"**

Velimira STOYANOVA, Boian KOULOV, Bilyana BORISOVA, Nikolay RACHEV ..... 478

**UTILIZATION OF BOTTOM ASH FOR THE RECLAMATION OF DISTURBED TERRAINS**

Petyr PETROV, Veneta STEFANOVA..... 479

**CHEMICAL COMPOSITION OF ESSENTIAL OIL OF WILD THYME GROWN ON SERPENTINE SOILS IN BULGARIA**

Violina ANGELOVA..... 480

**PARENT MATERIAL AS A KEY DETERMINANT OF SOIL PROPERTIES IN SOUTHERN PART OF NATIONAL PARK KRKA, CROATIA**

Aleksandra BENSA, Mirna ŠVOB, David DOMÍNGUEZ-VILLAR, Dražen PERICA, Kristina KRKLEC..... 481

**THE IMPACT OF LAND USE AND CLIMATE CHANGE ON EROSION PROCESSES AND THEIR MITIGATION FROM LANDSCAPE PERSPECTIVE**

Bořivoj ŠARAPATKA, Marek BEDNÁŘ..... 482

**EFFECT OF SELECTED ESSENTIAL OILS ON ACUTE MORTALITY OF *VARROA DESTRUCTOR***

Marian HÝBL, Petr MRÁZ, Alena VANIČKOVÁ..... 483

**RISK SPATIALIZATION OF AGRICULTURAL PHYTOSANITARY PRACTICES: CASE STUDY IN SOUTH-WEST FRANCE**

Chaima GRIMENE, Oussama MGHIRBI, Philippe LE GRUSSE, Jean-Paul BORD ..... 484

**ETOPHY: WEB PLATFORM FOR MANAGING THE IMPACTS OF PLANT PROTECTION PRODUCTS USED IN AGRICULTURE**

Oussama MGHIRBI, Philippe LE GRUSSE, Chaima GRIMENE, Elisabeth MANDART, Jacques FABRE, Julie CAUBEL, Isabelle NEMBROT, Jean Philippe BOULANGER, Jean-Paul BORD.. 485

**NUTRITIVE VALUE OF RIPARIAN COMMON REED BIOMASS FOR RUMINANTS**

Fokion PAPATHANASIOU, Konstantinos ZARALIS, Irene KOUTSERI, Myrsini MALAKOU, Angelos PAPADOPOULOS Anastasia PLIANTSA, Marialena AGGELAKI, Vasiliki KARETSA, Ioannis PAPADOPOULOS ..... 486

**ASSESSING THE POTENTIAL USE OF GFS-ANL MODEL WEATHER DATA IN FIELD-SCALE PRECISION AGRICULTURE IMPLEMENTATION**

George ARAMPATZIS, Evangelos HATZIGIANNAKIS, Vassilios PISINARAS, Charalampos DOULGERIS, Evangelos TZIRITIS, Ioannis TSAKMAKIS ..... 487

**MOLECULAR CHARACTERIZATION OF GREEK SWEET CHERRY LANDRACES (*PRUNUS AVIUM* L.) USING MICROSATELLITE MARKERS**

Dimitra DIMOU, Georgios PATAKIOUTAS, Ioannis GANOPOULOS, Dimitrios KYRKAS, Paraskevi YFANTI, Nikolaos MANTZOS, Ioannis MANTHOS, Nikolaos NIKISIANIS, Eleni MALOUPA ..... 488

**DECISION SUPPORT SYSTEM FOR WASTEWATER AND BIOSOLIDS SAFE REUSE IN AGRICULTURAL APPLICATIONS**

Spyridon S. KYRITSIS, Prodromos H. KOUKOULAKIS, Ioannis K. KALAVROUZOTIS ..... 489

**SOIL INORGANIC NITROGEN AND COTTON YIELD SIMULATION USING THE CropSyst MODEL: A PRELIMINARY CASE STUDY IN GREECE**

Maria KOKKORA, Panagiota KOUKOULI, Pantazis GEORGIU, Dimitrios KARPOUZOS, Fotis BILIAS, Dionisios GASPARATOS ..... 490

**POTENTIAL FOR REUSE OF THE DRAINAGE WATER IN HYDROPONIC CULTIVATIONS OF TOMATO PLANTS**

Pavlos TOURSIDIS, Petros GIKAS ..... 491

**VULNERABILITY ASSESSMENT OF SOIL SALINIZATION BY IRRIGATION WITH SALINE WATER. APPLICATION IN THE COASTAL AREA OF RHODOPE, NE GREECE**

Vassilis ASCHONITIS, Evangelos TZIRITIS, Giorgos ARAMPATZIS, Paschalis DALAMPAKIS, Charis DOULGERIS, Andreas PANAGOPOULOS, Vassilios PISINARAS, Katerina SACHSAMANOGLOU, Evangelos HATZIGIANNAKIS ..... 492

**SUSTAINABILITY YIELD INDEX AND YIELD TRENDS OF WHEAT CROP IN LONG-TERM FERTILITY EXPERIMENT UNDER MAIZE-WHEAT SYSTEM**

Neha SHARMA, Narender KUMAR SANKHYAN, Anjali SABHARWAL, Raj PAL SHARMA 493

**BHILWA (*SEMECARPUS ANACARDIUM*) - IMPORTANT TREE**

Dipika AYATE, Shedage SWATI, Garima GUPTA, Pankaj LAVANIYA, M. J. DOBRIYAL, A. K. PANDEY ..... 494



<b>EVALUATION OF WINTER WHEAT YIELD USING SATELLITE IMAGERY</b> Maziar FARZINBEH, Hassan MAKARIAN, Rozbeh MOAZENZADEH, Hamid ABASDOKHT	495
<b>CLIMATE CHANGE AND FOOD SECURITY: A REVIEW ON CHALLENGES AND OPPORTUNITIES FACED FARMING SYSTEMS IN ARID REGIONS</b> Mohsen JAHAN, Shiva GHALENOEI.....	496
<b>ENERGY CONSUMPTION AND FOOD PRICE: A QUANTILE REGRESSION APPROACH ON IRANIAN DATA</b> Reza MOGHADDASI, Nemat MOUSAVI .....	497
<b>NEXUS BETWEEN ENERGY CONSUMPTION AND AGRICULTURAL INFLATION: IRANIAN EXPERIENCE</b> Reza MOGHADDASI, Niyooosha NARAGHI.....	498
<b>THE REMEDIATION POTENTIAL FOR PAHS OF <i>VERBASCUM SINUATUM</i> L. COMBINED WITH AN ENHANCED RHIZOSPHERE LANDSCAPE: A FULL-SCALE MESOCOSM EXPERIMENT</b> Alessia POSTIGLIONE, Daniela ZUZOLO, Rosaria SCIARRILLO, Carmine GUARINO .....	499
<b>BIOMASS-WASTE DERIVED PROTEIN HYDROLYSATES THROUGH PROTEOLYTIC ENZYMES IMMOBILIZED ON BIOPOLYMERIC SUPPORTS</b> Alessio CESARETTI, Nicolò MONTEGIOVE, Eleonora CALZONI, Roberto Maria PELLEGRINO, Leonardo LEONARDI, Carla EMILIANI .....	500
<b>SUSTAINABLE USE OF PLANT PROTECTION PRODUCTS IN <i>NATURA 2000</i> AREAS: MITIGATION OF IMPACTS AND BIODIVERSITY CONSERVATION</b> Carlo Maria CUSARO, Carolina GRAZIOLI, Alessio NOVELLA, Sofia GIGLIOTTI, Tamara TEDESCHI, Lorenzo RAMPINI, Daniele RATTINI, Tiziano POZZI, Maura BRUSONI.....	501
<b>PLANT-SOIL-MICROBIOTA COMBINATION FOR THE REMOVAL OF TOTAL PETROLEUM HYDROCARBONS (TPH): AN IN-FIELD EXPERIMENT</b> Daniela ZUZOLO, Guarino CARMINE, Maria TARTAGLIA, Sciarrillo ROSARIA .....	502
<b>MIXED MICROBIAL AND THERMAL DEGRADATION OF AGRICULTURAL DERIVED PLANT WASTES</b> Eleonora CALZONI, Alessio CESARETTI, Nicolò MONTEGIOVE, Roberto Maria PELLEGRINO, Leonardo LEONARDI, Carla EMILIANI .....	503
<b>EFFECTS OF A MICROBIAL CONSORTIUM ON <i>SCHEDONORUS ARUNDINACEUS</i> IN A PLURICONTAMINATED SOIL</b> Maria Antonietta RANAUDA, Maria TARTAGLIA, Daniela ZUZOLO, Antonello PRIGIONIERO, Maria MAISTO, Alessia POSTIGLIONE, Pierpaolo SCARANO, Rosaria SCIARRILLO, Carmine GUARINO .....	504
<b>PERFORMANCE OF A PILOT-SCALE CONSTRUCTED WETLAND SYSTEM AND REUSE OF TREATED WASTEWATER IN AGRICULTURAL IRRIGATION</b>	

Mario LICATA, Salvatore LA BELLA, Teresa TUTTOLOMONDO, Davide FARRUGGIA .....	505
<b>IN VITRO METHANOGENIC FERMENTATION INHIBITED BY DIFFERENT EXTRACTS OF <i>HYPOESTES FORSSKAOLII</i> (VAHL) R. BR. (ACANTHACEAE) LEAVES</b>	
Massimiliano D'AMBOLA, Alessandro VASTOLO, Marcello SCIVICCO, Monica I. CUTRIGNELLI, Lorella SEVERINO, Serena CALABRÒ .....	506
<b>PROTEIN AND AMINO ACID PROFILE ANALYSIS OF AGRI-FOOD WASTE BIOMASSES</b>	
Nicolò MONTEGIOVE, Eleonora CALZONI, Alessio CESARETTI, Roberto Maria PELLEGRINO, Leonardo LEONARDI, Carla EMILIANI .....	507
<b>SUGGESTED SOLUTIONS FOR WATER PROBLEM IN LIBYA</b>	
Ehdadan Jamal ALI MOHAMED.....	508
<b>EFFECTIVENESS OF DIGESTATE FERTILIZATION ON SOIL MICROBIAL ACTIVITY AND GREENHOUSE GAS EMISSIONS</b>	
Modupe DOYENI, Skaidrė SUPRONIENE, Vita TILVIKIENE .....	509
<b>MODELING SUSTAINABLE ENTREPRENEURSHIP IN THE COVID-19 ERA</b>	
José Maros BUSTOS-AGUAYO, Margarita JUAREZ-NAJERA, Francisco ESPINOZA-MORALES, Cruz GARCÍA-LIRIOS, Javier CARREÓN-GUILLÉN, Jorge HERNANDEZ-VALDES.....	510
<b>GENETIC PECULIARITIES OF BROWN SOILS IN NATURAL AND ANTHROPOGENIC ECOSYSTEMS OF MOLDOVA</b>	
Tamara LEAH, Valerian CERBARI, Yuri ROZLOGA, Vladimir FILIPCIUC .....	511
<b>SOIL PROTECTION, AN ISSUE FOR AGRICULTURAL DEVELOPMENT: CASE OF MOROCCO</b>	
Jilali BEN DRISS.....	512
<b>DESIGN AND STUDY OF AN INNOVATIVE PASSIVE SOLAR HEATING LAHOSYSTEM INSTALLED IN MULTI-SPAN GREENHOUSE</b>	
Lahoucine GOURDO, Hicham FATNASSI, Rachid BOUHARROUD, Ahmed WIFAYA, Hassan DEMRATI, Ahmed BEKKAOUI, Ahmed AHAROUNE, Lahen BOUIRDEN , Khadija ACHGAR, Ahmed CHRAIBI .....	513
<b>AN ASSESSMENT OF THE PUBLIC-PRIVATE PARTNERSHIP POLICY AROUND AGRICULTURAL LAND IN MOROCCO</b>	
Meriem EL KOUHEN .....	514
<b>ENTREPRENEURIAL INNOVATION AND SUSTAINABLE FOREST MANAGEMENT: THE CASE OF IFRANE REGIONAL NATURAL PARK IN MOROCCO</b>	
Mustapha OUATMANE, Jilali BENDRISS .....	515
<b>LABELING OF LOCAL PRODUCTS FOR LOCAL DEVELOPMENT AND PROTECTION OF BIODIVERSITY</b>	

Mustapha OUATMANE, Jilali BENDRISS .....	516
<b>INTEGRATED NUTRIENTS MANAGEMENT IN FIELD CROPS PRODUCTION: A BEST WAY FOR SUSTAINABLE SOIL MANAGEMENT IN CHANGING CLIMATE</b>	
Amanullah KHAN .....	517
<b>AN ANALYSIS OF ECOLOGICAL FOOTPRINT IN RURAL URBAN AREAS OF DISTRICT SWAT, KHYBER PAKHTUNKHWA (PAKISTAN)</b>	
Anwar HUSSAIN, Umar HAYAT .....	518
<b>IMPACT OF UNTREATED SLAUGHTERHOUSE EFFLUENT ON THE ACCUMULATION AND UPTAKE OF ZN, NI, AND CD BY RICE (<i>ORYZA SATIVA L.</i>) CROP</b>	
Ateeba SEHAR, Hamaad Raza AHMAD, Muhammad SABIR.....	519
<b>POTENTIAL ANTIMICROBIAL COMPOUNDS IN FLOWER EXTRACT OF <i>PLUMERIA ALBA</i></b>	
Malik F. H. FERDOSI, Aroosa AFZAL, Muhammad KALEEM NASEEM, Iqra HAIDER KHAN, Arshad JAVAID.....	520
<b>NUTRIENT USE EFFICIENCY OF CHILIES PLANTS CULTIVATED WITH ACIDIFIED IRRIGATION WATER</b>	
Muneeb HASHMI, Muhammad SHAFIQ, Rashid MEHMOOD .....	521
<b>PROTECTIVE POTENTIAL OF PLANTS OF DEOSAI PLAINS AFTER 1<sup>ST</sup> WAVE OF COVID-19</b>	
Sumaira SAHREEN .....	522
<b>A MELIORATIVE EFFECTS AND SOIL CARBON SEQUESTRATION POTENTIAL OF ORGANIC AND IN-ORGANIC AMENDMENTS IN SALT-AFFECTED SOILS IN A SEMI-ARID REGION OF ASIA</b>	
Zia Ur Rahman FAROOQI, Muhammad SABIR, Hamaad Raza AHMAD, Muhammad ARFAN .	523
<b>THE INFLUENCE OF RAILWAY JUNCTION ZDUŃSKA WOLA – KARSZNICE (CENTRAL POLAND) ON THE CONTENT OF TRACE METALS IN SURFACE LEVELS OF SOILS</b>	
Ilona TOMCZYK-WYDRYCH, Anna ŚWIERCZ.....	524
<b>MANURE APPLICATION AS A SOURCE OF MICROBIAL AND CHEMICAL POLLUTANTS IN THE ENVIRONMENT</b>	
Ewa KORZENIEWSKA, Martyna BUTA, Wiktor ZIELIŃSKI, Jakub HUBENY, Damian ROLBIECKI, Monika HARNISZ.....	525
<b>CHANGES IN THE <i>EUSTIGMATOS MAGNUS</i> FATTY ACID PROFILE SUITABLE FOR BIODIESEL PRODUCTION</b>	
Izabela KRZEMIŃSKA, Wioleta BABIAK, Agata PIASECKA .....	526

<b>IDENTIFICATION OF BACTERIA AFFECTING WHITE MULBERRY (MORUS ALBA) IN POLAND</b>	
Małgorzata ŁOCHYŃSKA, Krzysztof KRAWCZYK, Jakub FRANKOWSKI .....	527
<b>THE OCCURRENCE AND DIVERSITY OF BETA-LACTAMASE GENES DURING WASTEWATER TREATMENT</b>	
Jakub HUBENY, Sławomir CIESIELSKI, Monika HARNISZ, Ewa KORZENIEWSKA, Tomasz DULSKI, Łukasz JAŁOWIECKI, Grażyna PŁAZA .....	528
<b>ANALYZES OF THE ENVIRONMENTAL BIOFILM</b>	
Tomasz CŁAPA, Dorota NAROŻNA, Damian NIKODEM, Jakub MICHALSKI.....	529
<b>APPLICABILITY OF BACTERIAL NANOCELLULOSE</b>	
Dimitrie STOICA, Angela-Stela IVAN, Alina-Mihaela CANTARAGIU, Maricica STOICA.....	530
<b>DETERMINATION OF ORGANOCHLORINE PESTICIDES IN SURFACE WATER FROM TIMIȘ AND SIBIU COUNTIES IN ROMANIA</b>	
Mădălina Maria JURCOVAN, Răzvan COTIANU, Mihaela PÎRVULESCU .....	531
<b>EUROPEAN LAND ABANDONMENT AND HOW A MORE DETAILED FOREST DEFINITION CAN HELP</b>	
Richard RIMOLI.....	532
<b>EVEN THOUGH THERE IS SUCH BENEFIT, THERE ARE HUMAN-MADE DISRUPTIVE CHANGES</b>	
Solomon MELAKU MELESE, Vasenev IVAN IVANOVICH .....	533
<b>AGRICULTURAL DROUGHTS AS EXTREMELY LONG PERIODS WITHOUT RAINFALL IN VOJVODINA PROVINCE, SERBIA</b>	
Bojan SRĐEVIĆ, Zorica SRĐEVIĆ, Pavel BENKA .....	534
<b>COMPARISON OF CELL WALL STRUCTURE OF DIFFERENT WESTERN BALKAN PLANT SPECIES AS A SOURCE FOR BIOFUELS</b>	
Daniela DJIKANOVIĆ, Ksenija RADOTIĆ, Aleksandar DEVEČERSKI, Gjozo GARAB, Gabor STEINBACH .....	535
<b>THE INFLUENCE OF ALKALINE HYDROLYSIS CONDITIONS ON THE ISOLATION OF HEPARIN FROM THE PORCINE INTESTINAL MUCOSA</b>	
Jelena MILANOVIC, Marko MALICANIN, Marija MILADINOVIC, Aleksandar MILETIC, Sasa OBRADOVIC, Biljana AN ELIĆ, Sanja MARKOVIC .....	536
<b>GEOGRAPHICAL ORIGIN OF ALIEN INVASIVE FISH SPECIES IN SERBIA</b>	
Milan GLIŠIĆ, Biljana DELIĆ VUJANOVIĆ .....	537
<b>THE VALORIZATION OF EDIBLE INDUSTRIAL WASTE IN FOOD PRODUCTION</b>	
Milenko KOSUTIC.....	538

<b>CHARACTERIZATION OF FUNGAL ISOLATES FROM DIFFERENT TYPES OF SOIL AND THEIR ABILITY TO DEGRADE CELLULOTIC ORGANIC MATTER</b> Simonida DJURIC, Timea HAJNAL-JAFARI, Dragana STAMENOV, Vladimira SEMAN, Biljana NAJVIRT, Nataša DOŠEN.....	539
<b>ECOLOGICAL AND ECOPHYSIOLOGICAL BASES OF BIOLOGICAL MONITORING</b> Slaviša MILOŠEVIĆ, Predrag JAKŠIĆ .....	540
<b>HUMUS CONTENT IN SERBIA TO THE MAPPING INVESTIGATED PITCH</b> Snezana JANKOVIĆ, Divna SIMIĆ, Sladjan STANKOVIĆ, Dragan RAHOVIĆ, Vera POPOVIĆ, Vuk RADOJEVIĆ, Jela IKANOVIĆ.....	541
<b>URBAN GREENERY RESEARCH: LEARNING TRENDS FROM THE PAST DECADE</b> Snežana POPOV, Zlata MARKOV RISTIĆ, Boris POPOV .....	542
<b>SURVIVAL OF MICROORGANISMS IN CRUDE OIL POLLUTED SOIL</b> Timea HAJNAL JAFARI, Dragana STAMENOV, Simonida ĐURIĆ .....	543
<b>INFLUENCE OF ENVIRONMENTAL FACTORS ON INSECT POLLINATORS IN NORTHERN SERBIA</b> Zlata MARKOV RISTIĆ, Dušanka VUJANOVIĆ .....	544
<b>RASPBERRY PRODUCTION AND ECONOMIC VALUE OF INSECT POLLINATION OF RASPBERRY IN SERBIA</b> Zlata MARKOV RISTIĆ, Snežana POPOV.....	545
<b>STATUS AND SWOT ANALYSIS OF DEER POPULATION MANAGEMENT AT THE HUNTING GROUNDS IN CENTRAL SERBIA</b> Zoran POPOVIĆ, Stefan STEPIĆ, Mladen POPOVAC, Vukan LAVADINOVIĆ .....	546
<b>HOW ECOSYSTEM SERVICES OF THE FLOODPLANS CAN CONTRIBUTE TO THE BETTER WATER QUALITY IN THE DANUBE REGION: IDES PROJECT</b> Zorica SRĐEVIĆ, Pavel BENKA, Jasna GRABIĆ, Bojan SRĐEVIĆ, Nenad ANTONIĆ, Milica ILIĆ, Senka ŽDERO .....	547
<b>ACTIVITY OF SOIL MICROBIAL COMMUNITY AS AN INDICATOR OF PLANT SPECIES INVASION ON SOIL ECOSYSTEM</b> Lenka BOBUŠKÁ, Lenka DEMKOVÁ, Marek RENČO, Andrea ČEREVKOVÁ.....	548
<b>MERCURY POLLUTION IN FORMER MINING AREA (SLOVAKIA) AND THEIR INFLUENCE ON BIOLOGICAL AND CHEMICAL SOIL PROPERTIES</b> Lenka DEMKOVÁ, Lenka BOBUŠKÁ, Július ÁRVAY .....	549
<b>ENVIRONMENTAL MANAGEMENT OF LIVESTOCK IN BOSNIA AND HERZEGOVINA ON THE EXAMPLE OF ENVIRONMENTAL PERMITS</b> Aleksandar ŠOBOT, Diana BILIĆ-ŠOBOT .....	550

**TRENDS IN EVAPOTRANSPIRATION IN THE SOUTHWEST OF THE IBERIAN PENINSULA, IN THE CONTEXT OF GLOBAL WARMING**

Abelardo GARCÍA-MARTÍN, Luis L.PANIAGUA, Fulgencio HONORIO, Francisco J. MORAL, Francisco J. REBOLLO, Virginia ALBERDI..... 551

**CHARACTERIZATION OF PHOTOSYNTHETIC ACTIVE RADIATION IN BURGOS**

Ana GARCIA-RODRIGUEZ, Sol. GARCIA-RODRIGUEZ, Manuel GARCÍA-FUENTE, Diego GRANADOS-LÓPEZ, David GONZÁLEZ-PEÑA ..... 552

**MODIFICATION OF ENZYME ACTIVITIES IMMEDIATELY AFTER CONVERSION OF A MEADOW TO A FODDER MAIZE CROP**

Carmen TRASAR-CEPEDA, Serafin GONZÁLEZ-PRIETO, Ángeles PRIETO-FERNÁNDEZ .. 553

**SPATIAL ANALYSIS OF ARIDITY DURING GRAPEVINE GROWING SEASON IN eXTREMADURA, SOUTHWESTERN SPAIN**

Cristina AGUIRADO, Luis L. PANIAGUA, Francisco J. MORAL, Francisco J. REBOLLO, Abelardo GARCÍA-MARTÍN, Fulgencio HONORIO, Virginia ALBERDI..... 554

**ANALYSIS OF THE EVOLUTION OF VINEYARD AREA IN EXTREMADURA (SOUTHWESTERN SPAIN) USING A GIS-BASED APPROACH. IS IT INFLUENCED BY CLIMATIC CHANGE?**

Francisco J. REBOLLO, Francisco J. MORAL, Virginia ALBERDI, Luis L. PANIAGUA, Abelardo GARCÍA-MARTÍN, Cristina AGUIRADO ..... 555

**DELINEATION OF MANAGEMENT ZONES ON GRAZED PERMANENT PASTURES BASED ON THE RASCH MODEL**

Francisco J. MORAL, Francisco J. REBOLLO, Virginia ALBERDI, Abelardo GARCÍA-MARTÍN, Luis L. PANIAGUA, Cristina AGUIRADO, Joao M. SERRANO ..... 556

**SUSTAINABLE REMOVAL OF COPPER-OXYCHLORIDE BY CALCIUM ALGINATE BIOPOLYMERS**

José Manuel CRUZ, Andrea MARTÍNEZ-ARCOS, Alejandro LÓPEZ-PRIETO, Benita PÉREZ-CID, Xanel VECINO, Ana Belén MOLDES ..... 557

**ANALYSIS OF TEMPORAL TRENDS FOR DAYS WITH OPTIMUM TEMPERATURES FOR GRAPEVINE GROWING IN THE RIBERA DEL GUADIANA DENOMINATION OF ORIGIN (SPAIN)**

Luis L. PANIAGUA, Francisco J. MORAL, Francisco J. REBOLLO, Abelardo GARCÍA-MARTÍN, Fulgencio HONORIO, Virginia ALBERDI, Cristina AGUIRADO ..... 558

**POTENTIAL EFFECTS OF MINIMUM AND MAXIMUM TEMPERATURE INCREASE ON GRAPEVINE IN EXTREMADURA (SPAIN)**

Virginia ALBERDI, Francisco J. MORAL, Francisco J. REBOLLO, Luis L. PANIAGUA, Abelardo GARCÍA-MARTÍN, Cristina AGUIRADO ..... 559

**EFFECT OF NITROGEN FERTILIZATION ON TRITICALE GROWN FOR DUAL PURPOSE OF FORAGE PLUS GRAIN IN SEMI-ARID ENVIRONMENT**

Sadreddine BEJI.....	560
<b>POTENTIAL AND POSSIBILITY OF CONVERTING AGRICULTURAL WASTES TO BENEFICIALLY SUSTAINABLE ENERGY AND MANURE IN TURKEY</b>	
Ako OMER .....	561
<b>THE RELATIONSHIP OF GLOBAL CLIMATE CHANGE WITH AGRICULTURE AND ENVIRONMENT</b>	
Aybüke KAYA .....	562
<b>DETERMINATION OF ENTERIC METHANE EMISSIONS AMOUNT FROM SHEEP BREEDING BETWEEN 2004-2020 IN TURKEY</b>	
Busra YAYLI, Ilker KILIC.....	563
<b>ASH CONTENT OF SOME OAK SPECIES</b>	
Gülnur MERTOĞLU ELMAS, Beyza KARABULUT .....	564
<b>THE QUALITY PARAMETERS OF RECYCLED PAPER</b>	
Gülnur MERTOĞLU ELMAS, Beyza KARABULUT .....	565
<b>FIBER PROPERTIES OF <i>RUMEKS CRISPUS</i> L. ROOT</b>	
Gülnur MERTOĞLU ELMAS.....	566
<b>INVESTIGATION OF LANDSCAPE CHARACTERISTICS OF DÜZCE PROVINCE, AKÇAKOCA DISTRICT IN THE SCOPE OF ECOTOURISM AND DEVELOPMENT OF ECOTOURISM RESOURCES</b>	
Gümüş Funda GÖKÇE, Mustafa ÖZBAY, Sinisa BERJAN.....	567
<b>DENSITY AND HABITAT PREFERENCE OF AN INVASIVE SPECIES (<i>Diadema setosum</i>, Leske, 1778) IN THE MEDITERRANEAN SEA</b>	
Mustafa Remzi GÜL, Mehmet AYDIN.....	568
<b>ASSESSMENT OF WATER AND ECONOMIC PRODUCTIVITY IN IRRIGATION MANAGEMENT</b>	
Oner CETIN, Kivanc Hayri DOGANAY, Ali Fuat TARI.....	569
<b>UNDERSTANDING THE RELATIONSHIP AMONG GEOMORPHOMETRY, SPECTRAL INDICES, AND SOME SOIL PROPERTIES IN A WATERSHED SCALE</b>	
Turgay DINDAROGLU, Vesna TUNGUZ, Emre BABUR, Mahmoud SELEIMAN, Rana ROY, Elina ZAKHARCHENKO .....	570
<b>SEED-ENHANCEMENT TECHNOLOGIES FOR ENHANCING SUSTAINABLE RESTORING OF THE ARID-LANDS</b>	
Heba JARRAR, Ali El-KEBLAWY .....	571
<b>IMPACT OF AGRICULTURAL RUNOFF OF PHOSPHORUS IN COASTAL WATER QUALITY</b>	
Deb JAISI, Qiang LI, Jessica ANTON, Kristi MINGUS .....	572

<b>5. ANIMAL HUSBANDRY .....</b>	<b>573</b>
<b>NUTRITIONAL VALUE OF GRASSLAND MEADOW GRASS GRAZED BY DAIRY COWS</b> Malika ABBAD-BENNOUR, Messaouda BELAID, Rachid AMRANE, Melkhir BOUDI, Fares BAICHE, Kenza KHELIL .....	574
<b>FARM CHICKEN ISA F15 STRAIN MONITORING IN THE TABLAT REGION (WILAYA DE MEDEA) ALGERIA</b> Abdelkrim YAHIMI, Nadia DJELLATA, Khadidja SELLALI .....	575
<b>THE HEALTH STATUS OF FOOT AND UDDER AT THE LEVEL OF DAIRY FARMS IN THE COMMUNE OF SIDI MHAMED BENALI</b> Nassima BOUHROUM, EL-Hassen LANKRI, Belmehel BENS AHLI.....	576
<b>FACTORS AFFECTING BIRTH WEIGHT OF ALGERIAN ARABIA GOATS KIDS REARED UNDER EXTENSIVE PRODUCTION SYSTEM</b> Allaoua BOUMEZAOUET, Rabeh ZEBSA, Saida MATALLAH, Lamia MEBIROUK- BOUDECHICHE, Kahina HOUD-CHAKER .....	577
<b>ISOLATION AND ANTIBIOTIC RESISTANCE OF <i>SALMONELLA</i> IN ALGERIAN BROILER SECTOR</b> Hamza KHALED, L. F. BENAMARA, N. KEBBAB .....	578
<b>ISOLATION AND ANTIBIOTIC RESISTANCE OF <i>SALMONELLA</i> IN ALGERIAN BROILER SECTOR</b> Hamza KHALED, Lynda Fatma BENAMARA, Nassima KEBBAB .....	579
<b>DAILY BEHAVIOR OF LOCAL BREED CATTLE AT THE AULNAIE OF AIN KHIAR DURING THE SUMMER</b> Razika BOURAS, Kahina HOUD-CHAKER, Lamia BOUDECHICHE.....	580
<b>NUTRITIONAL VALUE OF GRASSLAND MEADOW GRASS GRAZED BY DAIRY COWS BY USING PRIVALIM SOFTWARE</b> Malika ABBAD-BENNOUR, Messaouda BELAID, Samir AIT SAID, Rachid AMRANE, Melkhir BOUDI, Fares BAICHE, Kenza KHELIL.....	581
<b>BACTERIAL ECTOMICROFLORA OF <i>VARROA DESTRUCTOR</i>, ECTOPARASITE OF HONEYBEE, COLLECTED IN THE APIARY OF BOUMERDES (ALGERIA)</b> Messaouda BELAID, Nora CHAHBAR, Fatma ACHEUK, Abdelkader OUIDAH, Mohamed Oussama AOMICHE .....	582
<b>EFFECT OF <i>VARROA DESTRUCTOR</i> ON THE HIND WINGS AND ON THE PHYSIOLOGY OF THE WORKER HONEYBEE (<i>APIS MELLIFERA INTERMISSA</i>)</b> Messaouda BELAID, Nora CHAHBAR, Fatma ACHEUK, Malika BENNOUR, Salaheddine DOUMANDJI.....	583



<b>STUDY OF THE ANTIBIOTICS AND SYMBIOTIC EFFECTS ON SPERMATIC QUALITY BY THE CASA SYSTEM</b>	
Mohamed El Bachir BOUCHICHA , Ammar KALEM, Nora MIMOUNE , Djamel KHELEF , Rachid KAIDI .....	584
<b>REPRODUCTIVE PARAMETERS IN A DAIRY FARM IN THE CENTER REGION OF ALGERIA</b>	
Ahmed El Bachir BOUCHICHA , Nora MIMOUNE , Mohamed Yassine AZZOUZ , Djamel KHELEF , Rachid KAIDI .....	585
<b>FELINE LEISHMANIASIS IN ALGERIA</b>	
Mustapha DJOUDI, R. TRIKI YAMMANI, R. KAIDI .....	586
<b>PREVALENCE OF THE MAIN REASONS FOR SEIZING CARCASSES AND BOVINE VISCERS IN SLAUGHTERHOUSES IN NORTHERN ALGERIA</b>	
Nadia DJELLATA , Aicha DAOUDI, Kenza MEDJAHED, Sarah NOURI .....	587
<b>STUDY OF CERTAIN ZOOTECHNICAL PARAMETERS DURING MONITORING OF CHICKEN BREEDING IN ALGERIA</b>	
Nadia DJELLATA, Saliha BOUCHAREB .....	588
<b>PREVALENCE AND RISK FACTORS OF CRYPTOSPORIDIOSIS IN CALVES IN NORTHERN ALGERIA</b>	
Nadia OUAkli, Nadia DJELLATA, Abdelkrim YAHIMI, Rachid KAIDI.....	589
<b>STUDY OF ANOGENITAL DISTANCE IN RABBITS: EFFECT ON SEXUAL BEHAVIOUR AND LITTER SIZE BIOLOGIC COMPONENTS</b>	
Naouel FEKNOUS, Rafik BELABBAS, Safia ZENIA, Ali BERBAR.....	590
<b>SEROPREVALENCE OF BORDER DISEASE VIRUS AND OTHER PESTIVIRUSES IN SHEEP IN ALGERIA AND ASSOCIATED RISK FACTORS</b>	
Naouel FEKNOUS, Hamza KHALED, Abdellah BOUYOUCEF .....	591
<b>CONTRIBUTION TO THE ASSESSMENT OF THE PHYSICOCHEMICAL, MICROBIOLOGICAL AND PARASITOLOGICAL QUALITY OF WATER FOR LIVESTOCK IN THE CENTRAL ALGER REGION</b>	
Rafik BELABBAS, Ali BERBAR, Rym EZZEROUG .....	592
<b>CHARACTERIZATION OF SEMEN OF THREE RABBIT BREEDS AND ARTIFICIAL INSEMINATION</b>	
Rafik BELABBAS, Ali BERBAR, Rym EZZEROUG .....	593
<b>GENETIC CORRELATIONS FOR REPRODUCTIVE AND GROWTH TRAITS IN RABBITS</b>	
Rafik BELABBAS, Rym EZZEROUG, Maria José ARGENTE, Ali BERBAR, Samir DISS, Zoulikha BOUDJELLA, Djamel TALAZIZA, Nassima BOUDAHDIR, Ghania ZITOUNI, Maria de La Luz GARCIA .....	594

<b>EVALUATION OF DIGESTIVE DISORDERS DUE TO <i>ESCHERICHIA COLI</i> IN RABBIT FARMS IN ALGERIA</b>	
Rym EZZEROUG, Naouel FEKNOUS, Abdellah BOUYOUCEF .....	595
<b>PERINATAL FACTORS AFFECTING SURVIVAL OF KITS</b>	
Rym EZZEROUG, Maria De La Luz GARCIA, Rafik BELABBAS, Ali BERBAR, Maria Josée ARGENTE .....	596
<b>PREVALENCE OF COCCIDIAN INFECTION IN RABBIT FARMS IN NORTH ALGERIA</b>	
Samia MAZIZ-BETTAHAR, Miriem AISSI, Hacina AINBAZIZ, Mohamed Sadek BACHENE, Safia ZENIA, Fairouz GHISANI .....	597
<b>IMPACT OF COCCIDIAL INFECTION ON THE ZOOTECHNICAL PERFORMANCE OF THE LOCAL RABBITS POPULATION</b>	
Samia MAZIZ-BETTAHAR, Miriem AISSI, Hacina AINBAZIZ, Safia ZENIA, Dalila TARZAALI, Ibtissem BOULBINA.....	598
<b>EFFECT OF INCORPORATION OF THE PLANT EXTRACTS IN NATURAL CASING ON CONTENT OF FATTY ACIDS IN FERMENTED SAUSAGES</b>	
Ana VELEMIR, Snježana MANDIĆ, Danica SAVANOVIĆ .....	599
<b>EFFECT OF THAWING METHODS ON THE PHYSICO-CHEMICAL PROPERTIES OF TURKEY MEAT</b>	
Danica SAVANOVIĆ, Snježana MANDIĆ, Goran VUČIĆ, Ana VELEMIR, Jovo SAVANOVIĆ, Nemanja TEŠANOVIĆ.....	600
<b>SENSORY PROPERTIES OF CHEESES OBTAINED BY DIFFERENT PROCESSES HEAT-ACID COAGULATION OF MILK</b>	
Danica SAVANOVIĆ, Ana VELEMIR, Jovo SAVANOVIĆ, Nevena RITAN .....	601
<b>NUTRITIONAL VALUE OF TRAPPIST CHEESE</b>	
Draženko BUDIMIR.....	602
<b>A CONTROL SYSTEM FOR REMOTE MONITORING AND CONTROL OF THE TEMPERATURE IN CHICKEN EGGS HATCHING USING ARTIFICIAL INCUBATORS</b>	
Nataša POPOVIĆ, Božidar POPOVIĆ .....	603
<b>INFLUENCE OF THE AGE OF LAYING HENS ON EGG PRODUCTION INTENSITY OF DIFFERENT EGG WEIGHT GROUPS</b>	
Tatjana KRAJISNIK, Jelena NIKITOVIC, Miroslav LALOVIC , Zoran MALETIC.....	604
<b>INFLUENCE OF LOCATION ON PARAMETERS OF CORN SILAGE QUALITY PREPARED ON FAMILY FARMS</b>	
Željko LAKIĆ, Rada JOVIĆEVIĆ, Bojana SAVIĆ, Igor ĐURĐIĆ .....	605
<b>TECHNICAL EFFICIENCY OF THE RIPARIAN BEEKEEPERS OF THE COMPLEX OF PROTECTED AREAS PÔ-NAZINGA-SISSILI IN BURKINA FASO</b>	
Soumaïla SAWADOGO ; Omer Souglimpo COMBARY; Alexis KABORE; Fabio BERTI .....	606

<b>VALIDATION OF A SCREENING METHOD FOR THE DETECTION OF RESIDUES OF SIX FAMILIES OF ANTIBIOTICS IN BROILER CHICKEN DROPPINGS</b>	
Camila BRAVO, Patricia DÍAZ, Diego ASTUDILLO, Ekaterina POKRANT, Aldo MADDALENO, Javiera CORNEJO .....	607
<b>EFFECT OF THE EXTRACTION PROCESS OVER THE OXYGEN RADICAL ABSORBANCE CAPACITY (ORAC) AND POLYPHENOL PROFILES OF GRAPE MARC</b>	
Jurij WACYK, Rodrigo MANCILLA, Jessica DORNER, Ivonne Lozano ÁLVARO PEÑA .....	608
<b>ACARICIDAL EFFECT OF ESSENTIAL OILS ACTIVE SUBSTANCES AND ACTIVE SUBSTANCES OF ACARICIDES AGAINST THE POULTRY RED MITES</b>	
Iva RÁDSETOULALOVÁ, Lucie KUPČÍKOVÁ, Martina LICHOVNÍKOVÁ .....	609
<b>EFFECT OF PRE-INCUBATION ON EMBRYONIC DEVELOPMENT AND HATCHABILITY</b>	
Marketa SKOUPA, Martina PESANOVA TESAROVA, Martina LICHOVNIKOVA, Marian FOLTYN.....	610
<b>EFFECT OF GENDER ON BASIC MEAT PRODUCTION PARAMETERS IN LAMB CARCASSES</b>	
Jan KUČTÍK, Leona KONEČNÁ, Monika ŠELIGOVÁ, Tomáš KOPEC, Radek FILIPČÍK .....	611
<b>THE INFLUENCE OF AGE ON QUALITATIVE AND QUANTITATIVE PARAMETERS OF STALLION EJACULATE</b>	
Vojtěch PEŠAN, Katarína SOUŠKOVÁ, Radek FILIPČÍK, Zuzana REČKOVÁ, Martin HOŠEK, Michaela BRUDŇÁKOVÁ .....	612
<b>THE PRODUCTIVE PERFORMANCE AND BLOOD ATTRIBUTES OF MAGHRABIAN DROMEDARY CAMEL INFLUENCED BY DIFFERENT BREEDING SYSTEMS</b>	
Fatma R. ABDEL AZIZ, Talal A. ABDULKAREEM .....	613
<b>EFFECT OF WATER SALINITY ON GROWTH PERFORMANCE, SURVIVAL RATE, FEED UTILIZATION AND BODY CHEMICAL COMPOSITION OF PACIFIC WHITE SHRIMP (<i>LITOPENAEUS VANNAMEI</i> BOONE, 1931) JUVENILE</b>	
Shimaa SERAG, Ramadan M. ABOU-ZIED, Mohamed FATHI .....	614
<b>THE DIFFERENTIATION OF BEEKEEPING PRACTICES SUCH AS WITNESSES TO THE EVOLUTION OF THE RELATIONSHIP BETWEEN BEEKEEPING AND AGRICULTURE WITHIN THE TERRITORY AND SYSTEMS OF ACTIVITIES</b>	
Ludovic ANDRES, Michel VAILLANT, Anna CASSOU.....	615
<b>EFFECTS OF PHYTOGENIC POLYPHENOLS IN FEED - A REVIEW</b>	
Bettina FAEHRICH .....	616
<b>SUSTAINABLE BREEDING STRATEGIES FOR CLIMATE CHANGE ADAPTATION FOR THE HONEYBEE</b>	
Kaspar BIENEFELD.....	617

<b>TERATOGENICITY TESTING OF CHLORPYRIFOS AND TEBUCONAZOLE IN CHICKEN EMBRYOS AFTER SIMULTANEOUS ADMINISTRATION</b>	
Rita SZABÓ, László MAJOR, József LEHEL, Nadhirah Binti SAIDON, Péter BUDAI.....	618
<b>CYTOLOGICAL EVALUATION OF MILK IN BOVINE MASTITIS: A PILOT RESEARCH</b>	
Janka TURBÓK, Gábor TORNYOS, Zoltán ZOMBORSZKY.....	619
<b>POST THAW QUALITY AND VIABILITY OF VITRIFIED IMMATURE OOCYTES USING DIFFERENT CRYOPROTECTANT CONCENTRATIONS IN SHEEP</b>	
Khursheed AHMAD SOFI, Beenish QURESHI, Riaz AHMAD SHAH, Mujeebur REHMAN FAZILI.....	620
<b>POST THAW IN VITRO MATURATION OF VITRIFIED IMMATURE OOCYTES IN SHEEP USING DIFFERENT CRYOPROTECTANT CONCENTRATIONS</b>	
Khursheed AHMAD SOFI, Beenish QURESHI, Tanveer MUSHTAQ.....	621
<b>GROWTH PERFORMANCE AND KLEIBER RATIO OF MECHERI SHEEP UNDER SMALL HOLDER MANAGEMENT SYSTEM OF TAMIL NADU</b>	
Muralidharan JAGANATHAN, Bandeswaran CHINNAONDI, Arun LOGANATHAN, Sankar VENKATACHALAM, Senthilkumar PANEERSELVAM, Thiruvenkadan ARANGANNOOR KANNAN, Rajendran RAMANUJAM .....	622
<b>EFFECT OF OLIVE LEAVES FEEDING ON PHENOLIC COMPOSITION AND PROTEASE ACTIVITY IN GOAT MILK</b>	
Andrea IANNI, Francesca BENNATO, Camillo MARTINO, Lisa GROTTA, Giuseppe MARTINO .....	623
<b>SILAGE PRODUCTION FOR RUMINANTS USING AGRO-INDUSTRIAL BYPRODUCTS</b>	
Angela Gabriella D'ALESSANDRO, Francesco VIZZARRI, Francesco IANNACCONE, Giovanni MARTEMUCCI.....	624
<b>CHARACTERIZATION OF THE RUMEN MICROBIOTA IN SAANEN GOAT KIDS FED OLIVE LEAVES</b>	
Francesca BENNATO, Andrea IANNI, Camillo MARTINO, Lisa GROTTA, Giuseppe MARTINO .....	625
<b>BALANCED FEEDING AFFECTS THE MINERAL CONTENT OF AWASSI SHEEP MILK</b>	
Muhi El-Dine HILALI, Barbara RISCHKOWSKY, Helmut MAYER.....	626
<b>BEE COLONY SWARMING EVENT DETECTION IN PRECISION BEEKEEPING</b>	
Aleksejs ZACEPINS, Armands KVIESIS, Vitalijs KOMASILOVS .....	627
<b>INFLUENCE OF BREED AND SEASON ON GOAT MILK AMINO ACIDS AND FATTY ACIDS</b>	
Evaldas ŠLYŽIUS, Vida JUOZAITIENĖ, Lina LAUČIENĖ, Rolandas STANKEVIČIUS, Lina ANSKIENĖ, Birutė ŠLYŽIENĖ.....	628

<b>FERMENTATION AND MICROBIAL DYNAMICS OF PERENNIAL GRASSES SILAGE PREPARED WITH BIOLOGICAL INOCULANT</b>	
Jurgita DAILIDAVIČIENĖ, Lina MERKEVIČIENĖ, Modestas RUŽAUSKAS, Sigita KERZIENĖ, Saulius ALIJOŠIUS .....	629
<b>EVALUATION OF MILK YIELD AND MILKING CHARACTERISTICS OF DIFFERENT GENOTYPES DURING LACTATION IN ORGANIC FARMS</b>	
Lina ANSKIENĖ, Renata JAPERTIENĖ, Giedrius PALUBINSKAS, Sigitas JAPERTAS.....	630
<b>PRODUCTIVITY DYNAMICS AND RELATIONSHIP BETWEEN QUANTITATIVE AND QUALITATIVE INDICATORS IN COWS OF THE HOLSTEIN BREED</b>	
Valentin FOKSHA, Alexandra KONSTANDOGLO, Vera GRANATCH, Igor AKBASH, Vasily KURULYUK .....	631
<b>ALTERNATIVE CELLS FOR ISOLATION, DETECTION AND PROPAGATION OF CAPRIPOX VIRUSES</b>	
Halima RHAZI, Najete SAFINI, Karima MIKOU, Meryeme ALHYANE, Matthias LENK, Khalid OMARI TADLAOUI, Mehdi ELHARRAK.....	632
<b>THE PREVALENCE OF SELECTED GENES AND MULTIDRUG RESISTANCE IN <i>CAMPYLOBACTER</i> SPP. ISOLATED FROM DOGS</b>	
Marek SELWET .....	633
<b>RESEARCH ON THE MANAGEMENT OF DAIRY BREEDING IN A FARM IN THE DORNELOR BASIN IN ROMANIA</b>	
Maria CIOCAN-ALUPII, Vasile MACIUC .....	634
<b>STUDY OF MILK PRODUCTION INDICES IN MARAMUREȘ BROWN BREED EXPLOITED AT THE SECUIENI NEAMȚ AGRICULTURAL RESEARCH AND DEVELOPMENT STATION</b>	
Mariana NISTOR-ANTON, Vasile MACIUC.....	635
<b>STUDIES ON ABERDEEN ANGUS BREEDING SYSTEMS AND LIVESTOCK IN ROMANIA</b>	
Mihaela ROIBU DABIJA, Mihai Cezar CIORAN, Vasile MACIUC.....	636
<b>INFLUENCE OF BACTERIA BACILLUS AND INACTIVATED YEASTS ON PHYSIOLOGICAL PARAMETERS AND HONEY PRODUCTIVITY OF BEES</b>	
Elina SOKOLOVA, Sergei MAGER, Ekaterina GRIZANOVA, Ivan DUBOVSKY.....	637
<b>GENETIC IMPROVEMENT OF PRODUCTION AND REPRODUCTION TRAITS OF PIGS</b>	
Lyubov GETMANTSEVA, Neckruz BAKOEV .....	638
<b>THE RELATIONSHIP BETWEEN CATTLE METABOLISM AND QUALITY OF FEED RATION</b>	
Nikolai A. MOROZKOV, Elena V. SUHANOVA .....	639

**STUDY OF THE DYNAMICS OF BETA-HYDROXYBUTYRATE AND HEPATO-SPECIFIC MARKERS IN THE BLOOD OF NEWLY CALVED COWS WITH DIFFERENT BODY CONDITION**

Svetlana V. VASILEVA, Roman M. VASILEV ..... 640

**THE PHYTOBIOTIC EFFECT OF NETTLE (*Urtica Simensis S.*) ON THE GROWTH OF CHICKEN “COBB 500”**

Bratislav PEŠIĆ, Nikola STOLIĆ, Nebojša ZLATKOVIĆ ..... 641

**COW MILK INSULIN LIKE GROWTH FACTOR-1: RISK OR BENEFIT FOR HUMAN HEALTH?**

Danijela KIROVSKI, Dragan KNEŽEVIĆ, Bojan GOLIĆ, Dragan KASAGIĆ, Ljubomir JOVANOVIĆ, Dušan BOŠNJAKOVIĆ, Julijana TRIFKOVIĆ, Željko SLADOJEVIĆ ..... 642

**THE HONEY AND ENVIRONMENT**

Diana BILIĆ-ŠOBOT, Aleksandar ŠOBOT ..... 643

**CORRELATIONS BETWEEN THE QUANTITY OF FORAGED POLLEN, THE NUMBER OF FORAGERS AND THE MORPHOLOGICAL TRAITS OF THE HONEY BEES**

Goran JEVTIĆ, Bojan ANĐELKOVIĆ, Snežana ANĐELKOVIĆ, Vladimir ZORNIĆ, Kazimir MATOVIĆ, Nebojša NEDIĆ ..... 644

**A NEED FOR THE INTRODUCTION OF THE PIG CARCASS CLASSIFICATION SYSTEM IN THE REPUBLIC OF SERBIA**

Ivan RADOVIĆ, Miroslava POLOVINSKI-HORVATOVIĆ, Mile MIRKOV, Nenad KATANIĆ 645

**QUALITY OF TABLE EGGS OF WHITE AND BROWN SHELL**

Lidija PERIĆ, Mirjana ĐUKIĆ STOJČIĆ, Sava SPIRIDONOVIĆ ..... 646

**INFLUENCE OF REARING SYSTEM ON THE CARCASS TRAITS AND CARCASS CONFORMATION OF FATTENING CHICKENS**

Lidija PERIĆ, Mirjana ĐUKIĆ STOJČIĆ, Sava SPIRIDONOVIĆ ..... 647

**THE IMPACT OF ORGANIC PRODUCTION OF GEESE ON THE ENVIRONMENT THROUGH THE PRISM OF EU LEGISLATION**

Milena MILOJEVIĆ, Goran STANIŠIĆ, Aleksandra MILOŠEVIĆ, Tatjana KRAJIŠNIK ..... 648

**EFFECTIVE POPULATION SIZE AND INBREEDING RATE OF HOLSTEIN POPULATION IN VOJVODINA AUTONOMOUS PROVINCE (SERBIA)**

Mirko IVKOVIĆ, Momčilo ŠARAN, Vladimir SAPUNDŽIĆ, Ljuba ŠTRBAC, Snežana TRIVUNOVIĆ ..... 649

**THE HEAVY METALS IN THE LIVER OF FATTENING PIGS AND MANGULICA IN THE REGION OF VOJVODINA, SERBIA**

Miroslava POLOVINSKI-HORVATOVIĆ, Ivan RADOVIĆ, Saša KRSTOVIĆ, Igor JAJIĆ, Darko GULJAŠ, Mile MIRKOV ..... 650

<b>DEFINING THE ECONOMIC VALUE OF THE TRAITS INCLUDED IN THE METHODS FOR THE ASSESSMENT OF PIGS GENETIC POTENTIAL</b>	
Mladen POPOVAC, Dragan RADOJKOVIĆ, Milica PETROVIĆ, Radomir SAVIĆ, Aleksandar MILETIĆ, Dalibor VUKOJEVIĆ, Radmila BESKOROVAJNI .....	651
<b>THE EFFECT OF ADDITIONAL FEEDING ON PRODUCTION TRAITS OF HONEYBEE COLONIES</b>	
Nebojša NEDIĆ, Denis VOJT, Kazimir MATOVIĆ, Goran JEVTIĆ .....	652
<b>THE EFFICIENCY OF USE OF OXALIC ACID AND THYMOL IN BEE COLONIES AGAINST <i>VARROA DESTRUCTOR</i> DURING AN ACTIVE SEASON</b>	
Nebojša NEDIĆ, Denis VOJT, Kazimir MATOVIĆ, Goran JEVTIĆ .....	653
<b>THE INFLUENCE OF FORAGE AND CONCETRATE RATIO IN THE DIET ON ESSENTIAL FATTY ACID CONTENT IN COWS MILK FAT</b>	
Nenad ĐORĐEVIĆ, Dušica RADONJIĆ, Goran GRUBIĆ, Bojan STOJANOVIĆ, Aleksa BOŽIČKOVIĆ, Blagoje STOJKOVIĆ .....	654
<b>DETERMINATION OF EXTERNAL, INTERNAL AND PROPERTIES OF EGGSHELL QUALITY</b>	
Ranko KOPRIVICA, Simeon RAKONJAC, Biljana VELJKOVIĆ, Dušan RADIVOJEVIĆ, Milun D. PETROVIĆ, Miloš Ž. PETROVIĆ, Jelena MLADENOVIĆ .....	655
<b>EFFECT OF SELENIUM FROM FOOD ON PHEASANT MEAT QUALITY</b>	
Saša OBRADOVIĆ, Raško STEFANOVIĆ, Sinisa BERJAN .....	656
<b>QUALITY AND SENSORY PROPERTIES OF WHITE-BRINED GOAT CHEESE</b>	
Snežana JOVANOVIĆ, Tanja VUČIĆ, Amarela TERZIĆ-VIDOJEVIĆ, Milica SPASENOVIĆ, Daliborka VUJČIĆ .....	657
<b>SPOILAGE POTENTIAL OF PASTEURIZED MILK MICROBIOTA</b>	
Tijana LEDINA, Jasna ĐORĐEVIĆ, Petar KRIVOKUĆA, Sara KITANOVIĆ, Snežana BULAJIĆ .....	658
<b>THE OCCURRENCE OF SUBCLINICAL MASTITIS AT SELECTED FARMS</b>	
Kristína TVAROŽKOVÁ, Vladimír TANČIN, Michal UHRINČAŤ, Lucia MAČUHOVÁ, Lukáš HLEBA .....	659
<b>ANTIMICROBIAL EFFECT OF COMMERCIAL POMEGRANATE POWDER ON BULL SEMEN MICROBIOTA</b>	
Aleksandar COJKIC, Ingrid HANSSON, Jane M. MORRELL .....	660
<b>CURRENT SITUATION OF ANATOLIAN BUFFALO HUSBANDRY AND BREEDING POSSIBILITIES IN VAN PROVINCE OF TURKEY</b>	
Turgut AYGÜN .....	661
<b>OCCUPATIONAL HEALTH AND SAFETY CULTURE IN ANIMAL PRODUCTION IN TURKEY</b>	

Turgut AYGÜN .....	662
<b>NOMADIC ACTIVITIES OF SMALL RUMINANT HUSBANDRY IN MUŞ PROVINCE OF EASTERN ANATOLIA IN TURKEY</b>	
Turgut AYGÜN .....	663
<b>COMPARISON OF EGGS FROM DIFFERENT EGG PRODUCTION SYSTEMS IN TERMS OF CAMPYLOBACTER</b>	
Ali AYGÜN, Talha DEMİRCİ, Doğan NARİNÇ .....	664
<b>MODELING OF GROWTH IN JAPANESE QUAILS CATEGORIZED BY EGG WEIGHT</b>	
Ali AYGÜN, Doğan NARİNÇ .....	665
<b>THE EFFECT OF DIFFERENT PLANT VEGETATION IN FREE-RANGE SYSTEM ON EGGSHELL MICROBIAL LOAD</b>	
Ali AYGÜN, Talha DEMİRCİ, Doğan NARİNÇ .....	666
<b>THE IMPACT OF BREEDING SEASON AND EGG STORAGE PERIOD ON HATCHERY PARAMETERS OF GRAND PARENT STOCK BROILER BREEDER EGGS</b>	
Bilgehan YILMAZ DİKMEN.....	667
<b>USING PROBIOTICS IN POULTRY NUTRITION: OPTIMIZING PERFORMANCE AND FEEDING COSTS</b>	
Merve GÜNDÜZ, Serap FENDERYA, Arda SÖZCÜ .....	668
<b>AVIAN HERPESVIRUSES AND THEIR POTENTIAL IMPACTS ON POULTRY HEALTH</b>	
Mustafa SOGUT, Bilge Kaan TEKELIOGLU .....	669
<b>IMPLICATIONS OF YUCCA IN REDUCING NITROGEN EXCRETION, OXIDATIVE STRESS AND IMPROVING PRODUCTION PERFORMANCE OF BROILER BIRDS</b>	
Asad SULTAN, Sar ZAMIN KHAN, Ziaul ISLAM, Faiza SHAHZADI.....	670
<b>6. RURAL DEVELOPMENT AND AGROECONOMY .....</b>	<b>671</b>
<b>ANALYZE OF FACTORS AFFECTING MARKETING CHANNEL CHOICE OF SMALLHOLDER FARMERS IN AFGHANISTAN</b>	
Ahmad Khalid SALAH, Hideyuki KANO, Naoyuki YAMAMOTO.....	672
<b>DIFFUSION OF SAVING IRRIGATION TECHNOLOGIES: THE ROLE OF PUBLIC INCENTIVES AND CROP PRICES</b>	
Samir BELAIDI, Foued CHEHAT .....	673
<b>LOCAL HONEY GOAT MILK YOGHURT PRODUCTION. PROCESS AND QUALITY CONTROL</b>	
Nesrine FEKNOUS , Lina Lamis OUCHENE , Mahieddine BOUMENDJEL , Djamel-Eddine MEKHANCHA , Yasmine BOUDIDA , Ahmed CHETTOUM , Amel BOUMENDJEL , Mahfoud MESSARAH .....	674



<b>PHYSICOCHEMICAL AND GLUCIDS PROFILE OF MOUNTAIN HONEYS FROM SERAIDILOCALITY (NORD-EAST, ALGERIA)</b>	
Nesrine FEKNOUS, Mahieddine BOUMENDJEL, Ahmed CHETTOUM, Djamel-Eddine MEKHANCHA, Azzeddine CHEFROUR, Abdelmoumen SEDARI, Anissa BERREDJEM, Hanène ATI, Faiza TAIBI, Amel BOUMENDJEL, Mahfoud MESSARAH .....	675
<b>MONITORING THE CONDITION OF AGRICULTURAL LAND AS A TOOL OF THE PRECISION FARMING SYSTEM</b>	
Anna KAZAK .....	676
<b>EXPLORING MOROCCAN OLIVE OIL CONSUMER ATTITUDE USING CONJOINT ANALYSIS</b>	
Kaoutar JAMAI, Ali ABIDAR .....	677
<b>TRACTOR SELECTION BY USING THE FUZZY TOPSIS METHOD OF MULTI-CRITERIA DECISION-MAKING</b>	
Miroslav NEDELJKOVIĆ .....	678
<b>RESILIENCE TO CLIMATIC INSTABILITIES IN BRAZILIAN SEMIARID RAINFED AGRICULTURE</b>	
José de Jesus Sousa LEMOS.....	679
<b>THE BULGARIAN MODEL OF LAND OWNERSHIP: THE "WHITE SPOTS" PHENOMENON</b>	
Diana KOPEVA, Angel SAROV.....	680
<b>RURAL DEVELOPMENT IN BULGARIA – SOME ECONOMIC AND DEMOGRAPHIC ASPECTS</b>	
Kliment NAYDENOV, Metodi IVANOV, Nadezhda ZHECHKOVA, Dimitar ATANASOV .....	681
<b>TRANSITION TOWARDS BLUE ECONOMY IN THE EUROPEAN UNION</b>	
Monika SABEVA .....	682
<b>THE INFLUENCING FACTORS OF DAIRY FARMERS' DECISION MAKING FOR MANURE AND SEWAGE MANAGEMENT: A CASE STUDY IN CHINA</b>	
Junyan ZHANG, Lei ZHANG, Mengmeng WANG, Changbin YIN, Thomas DOGOT .....	683
<b>CHANGES IN GROCERY PURCHASES IN THE NEW MILLENNIUM: THE EXAMPLE OF THE SOUTH MORAVIAN REGION IN THE CZECH REPUBLIC</b>	
Zdenek SILHAN, Ondrej KONECNY.....	684
<b>INVOLVEMENT OF FARMERS IN LOCAL PARTNERSHIPS: STUDY OF LOCAL ACTION GROUPS STRUCTURE IN THE CZECH REPUBLIC</b>	
Ondřej KONEČNÝ, Pavla SADLOŇOVÁ, Zdeněk ŠILHAN, Marie JÍLKOVÁ.....	685
<b>TRADE EXCHANGE AND THE POSSIBILITY OF ACHIEVING FOOD SECURITY BETWEEN EGYPT AND NILE BASIN COUNTRIES</b>	
Mahmoud ABDELSALM AHMED .....	686

<b>CHARACTERIZATION OF COLUMBIAN COCOA BUTTER: INFLUENCE OF COMPOSITION ON STRUCTURE</b>	
Daniel J. E. KALNIN.....	687
<b>THE TWO DISCREET PILLARS OF FOOD SECURITY: TRUST AND INFORMATION SHARING</b>	
David GASC, Elen LEMAITRE-CURRI .....	688
<b>THE MED-AMIN HARVEST EARLY FORECAST AS A CONTRIBUTION TO FOOD SECURITY IN THE MEDITERRANEAN</b>	
David GASC, Giacinto MANFRON, Pascal BERGERET, Bettina BARUTH .....	689
<b>STUDY OF THE TRAJECTORIES OF CHANGES IN BEEKEEPING IN A SMALL REGION OF IN BOSNIA AND HERZEGOVINA</b>	
Vesna MRDALJ, Ludovic ANDRES, Michel VAILLANT, Etienne ESTNER.....	690
<b>BETWEEN ENVIRONMENT AND SOCIETY: IS THE KITOB-SHAHRISABZ AGRARIAN SYSTEM ABLE TO COPE WITH POPULATION GROWTH IN A CONTEXT OF UNEQUAL ACCESS TO RESOURCES?</b>	
Ludovic ANDRES, Michel VAILLANT, Anna MORIO .....	691
<b>LEADING FACTORS OF SUSTAINABLE RURAL TOURISM DEVELOPMENT: CASE OF GEORGIA</b>	
Maia DIAKONIDZE.....	692
<b>DOING IT RIGHT TO ALLEVIATE POVERTY: APPLICATION OF THE SUSTAINABLE FOOD VALUE CHAIN DEVELOPMENT FRAMEWORK TO GHANA'S POULTRY SECTOR</b>	
Mavis BOIMAH, Craig CHIBANDA, Johanna SCHOTT .....	693
<b>BIOECONOMY IN LIVESTOCK SECTOR THROUGH BIBLIOMETRIC NETWORK ANALYSIS: A CASE FROM GREECE</b>	
Aikaterini PALTAKI, Konstantinos ZARALIS, Fotios CHATZITHEODORIDIS, Anastasios MICHAILIDIS, Efstratios LOIZOU .....	694
<b>CURRENT SITUATION AND TRAINING NEEDS ON HERB SECTOR: EVIDENCE FROM GREECE, MOLDOVA, ARMENIA AND GEORGIA</b>	
Aikaterini PALTAKI, Evropi-Sofia DALAMPIRA, Anastasios LIVADIOTIS, Smaragda NIKOULI, Anastasios MICHAILIDIS, Sona TELUNTS, Tamar SARGSYAN, Oxana PALADICIUC, Roman CURCA, Natia GELASHVILI.....	695
<b>A BIBLIOMETRIC NETWORK ANALYSIS ON AGRICULTURAL BIOECONOMY</b>	
Christina-Ioanna PAPADOPOULOU, Katerina MELFOU, Efstratios LOIZOU, Christos KARELAKIS .....	696
<b>THE POLICY REFORMS THAT SHAPED CONTEMPORARY RURAL SOCIETY IN GREECE</b>	

Georgia KIPOUROPOULOU, Katerina MELFOU .....	697
<b>EFFECTIVENESS OF VILLAGE LEVEL ORGANIZATION (VLO) UNDER NATIONAL RURAL LIVELIHOOD MISSION, NAGALAND, INDIA.</b>	
Mary N ODYUO, J. LONGKUMER, Renjano N. OKHYOPVUI.....	698
<b>AGRICULTURE EXTENSION AND ADVISORY SERVICES IN BURKINA FASO AND NIGER</b>	
Hamid EL BILALI, Lawali DAMBO, Imaël Henri Nestor BASSOLE, Jacques NANEMA.....	699
<b>TRANSITION TO ORGANIC AGRICULTURE IN MOROCCO</b>	
Hamza EL GHMARI, Rachid HARBOUZE, Hamid EL BILALI.....	700
<b>AGROECOLOGY IN BURKINA FASO AND NIGER</b>	
Hamid EL BILALI, Lawali DAMBO, Imaël Henri Nestor BASSOLE, Jacques NANEMA, Generosa CALABRESE .....	701
<b>URBAN AND PERI-URBAN AGRICULTURE IN EGYPT</b>	
Islam Mohamed KAMEL, Hamid EL BILALI.....	702
<b>MEDITERRANEAN DIET IN THE WESTERN BALKANS</b>	
Hamid EL BILALI, Gianluigi CARDONE, Francesco BOTTALICO, Giovanni OTTOMANO PALMISANO, Antonia ACQUAFREDDA, Roberto CAPONE.....	703
<b>PASTORALISM AND SUSTAINABLE DEVELOPMENT IN THE MEDITERRANEAN REGION</b>	
Hamid EL BILALI, Francesco BOTTALICO, Giovanni OTTOMANO PALMISANO, Gianluigi CARDONE, Antonia ACQUAFREDDA, Roberto CAPONE.....	704
<b>FOOD LOSSES AND WASTE DURING THE COVID-19 PANDEMIC AND HOW IT IS CHALLENGING AGRI-FOOD LOGISTICS</b>	
Noureddin DRIOUECH, Erika QUENDLER.....	705
<b>UNDERSTANDING THE ROLE OF THE CAP IN ACHIEVING SUSTAINABILITY AND RURAL DEVELOPMENT GOALS</b>	
Valeria SODANO, Maria Teresa GORGITANO .....	706
<b>SOCIAL-DEMOGRAPHIC CHARACTERISTICS OF THE HILLY-MOUNTAINOUS AREAS IN THE REPUBLIC OF NORTH MACEDONIA</b>	
Jovan AZDERSKI, Bozhura FIDANSKA, Despina POPOVSKA STOJANOV, Elenica SOFIJANOVA , Elena AZDERSKA.....	707
<b>ARGAN OIL COOPERATIVES IN THE SOUSS-MASSA REGION OF MOROCCO: A FORM OF COOPERATION LINKING PEOPLE TO THE LAND</b>	
Fatiha ADDYOUBAH.....	708
<b>QUALITY OF LIFE OF RURAL HOUSEHOLDS IN NIGERIA: AN ASSESSMENT OF SPICES PRODUCERS IN KANO STATE</b>	

Oluyemisi ADEWALE, John OLADEJI, Yau MU'AZU, Muhammad SHUAIBU .....	709
<b>SOCIO-ECONOMIC PROFILING OF SPICES ENTREPRENEURS IN OYO STATE, NIGERIA</b>	
Oluyemisi ADEWALE, Timothy FARIYIKE, John OLADEJI .....	710
<b>POTENTIALS OF IRRIGATION ALONG TELWA VALLEY IN TCHIROZERINE DEPARTMENT, AGADEZ AREA (NIGER)</b>	
Ama Souleymane ABOUBACAR, Maharazu A. YUSUF, Mahamadou MOUSSA DIT KALAMOU, Soumana BOUBACAR.....	711
<b>COUNTRY LEVEL ASSESSMENT OF FOOD LOSS AND WASTE IN PAKISTAN</b>	
Junaid ALAM MEMON .....	712
<b>MICROALGAE- ROLE IN DEVELOPMENT OF BIO (H<sub>2</sub>, ETHANOL AND DIESEL) FUELS</b>	
Sara JANIAD, Mehboob AHMED .....	713
<b>YOUNG FARMERS IN PORTUGAL: ASSESSMENT OF POLICY EFFECTS</b>	
Fátima OLIVEIRA, Pedro REIS , Ana Bela LOPES; M Leonor da Silva CARVALHO .....	714
<b>FOOD WASTE MANAGEMENT ALONG THE AGRI-FOOD SUPPLY CHAIN</b>	
Dimitrie STOICA, Angela-Eliza MICU, Petru ALEXE, Maricica STOICA .....	715
<b>GREEN FOR CARE - STAKEHOLDER ANALYSIS IN ROMANIA</b>	
Sergiu FLOREA, Sebastian CUCUIAT, Vladut TOMSA .....	716
<b>ACCESS TO PUBLIC HEALTH SERVICES FOR DIFFERENT GROUPS OF RURAL POPULATION IN RUSSIA</b>	
Tatiana BLINOVA, Anna VYALSHINA, Nikita PETROV .....	717
<b>INCREASING THE AGRICULTURAL PRODUCT COMPETITIVENESS AS A FACTOR IN THE AGRICULTURAL ENTERPRISE EXPORT DEVELOPMENT</b>	
Vyacheslav VOYTYUK, Tatiana MARINCHENKO, Margarita VOYTYUK.....	718
<b>INTERNET OF THINGS IN LAND AND NATURAL RESOURCES MANAGEMENT</b>	
Sergey VOLKOV, Dmitry SHAPOVALOV, Vasily NILIPOVSKIY.....	719
<b>THE DETERMINANTS OF MICRO-AGRICULTURAL COMPANIES PROFITABILITY IN VOJVODINA PROVINCE (SERBIA)</b>	
Dragana TEKIĆ, Beba MUTAVDŽIĆ, Dragan MILIĆ, Vladislav ZEKIĆ, Tihomir NOVAKOVIĆ, Veljko ŠARAC .....	720
<b>STUDING UNIQUENESS OF ACACIA HONEY FROM SERBIA – EVALUATION OF SENSORY PROPERTIES, COLOR AND TEXTURE</b>	
Dubravka ŠKROBOT, Jelena TOMIĆ, Nikola MARAVIĆ, Slađan RAŠIĆ, Aleksandra NOVAKOVIĆ, Aleksandar MARIĆ, Marijana SAKAČ .....	721

<b>TENDENCIES AND PREDICTION OF PRICES OF INDUSTRIAL CROPS IN SERBIA</b> Nebojša NOVKOVIĆ, Beba MUTAVDŽIĆ, Ljiljana DRINIĆ, Snežana JOVANOVIĆ, Dragana TEKIĆ .....	722
<b>TENDENCIES AND PREDICTION OF GRAPE PRODUCTION CHARACTERISTICS IN SERBIA</b> Nebojša NOVKOVIĆ, Nataša VUKELIĆ, Blagoje PAUNOVIĆ, Armina HUBANA, Ljiljana DRINIĆ .....	723
<b>ANALYSIS OF THE PARTICIPATION OF INCENTIVES IN LIVESTOCK IN RELATION TO THE AGRICULTURAL BUDGET OF THE REPUBLIC OF SERBIA</b> Nikola STOLIĆ, Bratislav PEŠIĆ, Nebojša ZLATKOVIĆ, Žarko KOPRIVICA.....	724
<b>ATTITUDES OF FARMERS FROM THE AREAS WITH NATURAL CONSTRAINTS TOWARD AGRICULTURAL AND RURAL DEVELOPMENT SUPPORT</b> Ružica PAPIĆ, Natalija BOGDANOV .....	725
<b>DEVELOPMENT OF IRRIGATION IN SERBIA FROM 2012 TO 2018</b> Steve GOSS.....	726
<b>ECONOMIC AND FINANCIAL ASPECTS OF CABBAGE PRODUCTION IN FAMILY FARMS IN THE REPUBLIC OF SERBIA</b> Mladen PETROVIĆ , Bojan SAVIĆ , Nikola LJILJANIĆ , Vedran TOMIĆ, Vojin CVIJANOVIĆ .....	727
<b>PROFITABILITY OF SMALL-SIZED FARMS IN REPUBLIC OF SERBIA</b> Veljko VUKOJE, Aleksandar MILJATOVIĆ .....	728
<b>COMPARATIVE ANALYSES OF FOODSTUFF GEOGRAPHICAL INDICATIONS IN SERBIA, BIH AND MONTENEGRO</b> Vlado KOVAČEVIĆ, Dragan BRENJO, Slobodan CVETKOVIĆ.....	729
<b>CONSUMERS' PERSPECTIVES ON ONLINE SHOPPING AND FOOD SAFETY DURING THE COVID-19 PANDEMIC</b> Aysun YENER ÖGÜR, Mustafa DİKMEN, Mehmet Emin YARDIMCI.....	730
<b>IMPACTS OF FIRST WAVE OF THE COVID-19 ON THE AGRICULTURAL PRODUCTION IN TURKEY: ASSESSING THE ROLES OF FARMERS DURING THE PANDEMIC</b> Celal CEVHER, Hakan ADANACIOĞLU, Nilgün DOĞAN .....	731
<b>EFFECT OF STATE SUBSIDIES GRANTED TO FARMERS FOR CERTIFIED SEEDS ON WHEAT YIELD IN TURKEY</b> Celal CEVHER, Şule COŞKUN CEVHER.....	732
<b>ASSESSING THE IMPACTS OF COVID-19 ON AGRICULTURE FROM THE PERSPECTIVE OF AGRICULTURAL ORGANIZATIONS: A CASE STUDY FROM GÜMÜŞHANE, TURKEY</b>	

Nilgün DOĞAN, Hakan ADANACIOGLU .....	733
<b>THE USING OF DIGITAL TECHNOLOGIES TO SOLVE PROBLEMS OF RURAL COMMUNITIES</b>	
Orhan ÖZÇATALBAŞ, E. M. C. ADENIDJI, M. KALAYCI, E. N. SARIKAYA .....	734
<b>THE IMPORTANCE OF RURAL EXTENSION AND ENERGY POLICIES FOR CLEAN AND MODERN ENERGY SOURCES</b>	
Orhan ÖZÇATALBAŞ, M. İMRAN .....	735
<b>LIVELIHOODS OF SMALL FARM HOUSEHOLDS IN COVID-19 PANDEMIC: A CASE STUDY IN THE RED RIVER DELTA OF VIETNAM</b>	
Nguyen Thi HAI NINH .....	736
<b>7. FORESTRY AND AGRO-FORESTRY.....</b>	<b>737</b>
<b>STUDY OF THE QUALITY OF CORK OF NORTHWEST ALGERIA</b>	
Mustapha El Habib FRIHI, Belkheir DEHANE .....	738
<b>GROWTH OF PEDUNCULATE OAK PROVENANCES ACCORDING TO ALTITUDES AND ECOLOGICAL-VEGETATION REIONIZATION OF THEIR ORIGIN</b>	
Mirzeta MEMIŠEVIĆ HODŽIĆ, Dalibor BALLIAN .....	739
<b>EFFECT OF LAND USE AND SOIL PROPERTIES ON SOIL TEMPERATURE DISTRIBUTION OF CAMBISOLS IN MOUNTAIN REGIONS</b>	
Milena KERCHEVA, Maria GLUSHKOVA, Katerina DONEVA, Stanimir STOINOV, Emiliya VELIZAROVA .....	740
<b>SEED YIELD IN FOUR PEDUNCULATE OAK (<i>QUERCUS ROBUR</i> L.) PROVENANCES IN CROATIA</b>	
Miran LANŠČAK, Sanja BOGUNOVIĆ, Anđelina GAVRANOVIĆ, Zvonimir VUJNOVIĆ, Mladen IVANKOVIĆ .....	741
<b>APPLICATION OF UNMANNED AERIAL VEHICLES IN PLANT HEALTH SURVEYS</b>	
Nikola ZORIĆ.....	742
<b>INFLUENCE OF GENETIC AND ENVIRONMENTAL DIFFERENCES ON MICROPROPAGATION OF WILD CHERRY (<i>PRUNUS AVIUM</i> L.)</b>	
Sanja BOGUNOVIĆ, Ivana BRLEK, Nevenka ČELEPIROVIĆ, Mladen IVANKOVIĆ .....	743
<b>INITIAL WORK ON THE BREEDING OF EUROPEAN BLACK POPLAR (<i>POPULUS NIGRA</i> L.) IN CROATIA</b>	
Zvonimir VUJNOVIĆ, Saša BOGDAN, Miran LANŠČAK, Sanja BOGUNOVIĆ, Anđelina GAVRANOVIĆ, Mladen IVANKOVIĆ .....	744
<b>SALT DISTRIBUTION AND POTATO RESPONSE TO IRRIGATION REGIMES UNDER VARYING MULCHING MATERIALS</b>	

Mohamed HASSAN ABD EL-WAHED, Abdulrasoul MOSA AL-OMRAN, Mahmoud MOHAMED HEGAZI, Mahmoud MOHAMED ALI, Yahi Abdelaty MOHAMED IBRAHIM, Ayman EL SABAGH .....	745
<b>SEEDBALL TECHNOLOGY – A POTENTIAL AFFORESTATION TOOL FOR DRY REGIONS OF THE WORLD</b>	
Charles Ikenna NWANKWO, Ludger HERRMANN .....	746
<b>LONG-TERM EFFECTS OF OAK DECLINE ON SHRUB INDIVIDUAL'S OCCURRENCES IN AN HUNGARIAN OAK FOREST</b>	
Tamás MISIK, Imre KÁRÁSZ .....	747
<b>ENGINEERING PROPERTIES OF SOAPNUT (<i>Sapindus emarginatus</i>)</b>	
Paramadhas SUDHA, Keerthiga R.R, Maunica T.P., Mohammed BASHEER, Jikky JAYAKUMAR .....	748
<b>ASSESSING POLLINOSIS RISK IN THE VESUVIUS NATIONAL PARK (SOUTHERN ITALY): A NOVEL APPROACH FOR INDEX OF URBAN GREEN ZONES ALLERGENICITY</b>	
Antonello PRIGIONIERO, Daniela ZUZOLO, Rosaria SCIARRILLO, Carmine GUARINO .....	749
<b>BALANCING ECONOMY AND ENVIRONMENTAL ISSUES IN PRIVATE FORESTRY IN LATVIA</b>	
Lelde VILKRISTE .....	750
<b>QUALITY PARAMETERS EVALUATION OF SPRUCE (<i>PICEA ABIES</i>) SEEDLINGS GROWN AT OPEN-NURSERY CONDITION</b>	
Vilda GRYBAUSKIENE, Gitana VYCIENE.....	751
<b>AGROFORESTRY BENEFITS NEAR THREATENED SPECIES, BROWN HARE (<i>LEPUS EUROPAEUS</i> L.)</b>	
Olgirda BELOVA .....	752
<b>RESPONSE OF LIFE FORMS OF UNDERSTORY PLANTS TO CLEAR-CUT LOGGING</b>	
Remigijus DAUBARAS, Laima ČESONIENĖ.....	753
<b>CHANGES IN FRUIT SIZE AND BIOCHEMICAL COMPOSITION OF VIBURNUM OPULUS FRUITS DURING RIPENING</b>	
Remigijus DAUBARAS, Laima ČESONIENĖ, Pranas VIŠKELIS.....	754
<b>IMPROVEMENT OF SEED GERMINATION AND SEEDLING RESISTANCE OF BEECH (<i>FAGUS SYLVATICA</i>) BY GROWTH REGULATORS</b>	
Dina ELISOVETCAIA, Raisa IVANOVA, Natalia MASCENCO, Jan BRINDZA .....	755
<b>NORTHERN TREELINES AS INDICATORS OF CLIMATE AND LAND USE CHANGES. A LITERATURE REVIEW</b>	
Oddvar SKRE .....	756

<b>MULTIFUNCTIONAL LANDSCAPE AGROFORESTRY SYSTEM ENHANCED THROUGH ECOSYSTEM SERVICES AND BIODIVERSITY</b>	
Fareeha ATHAR, Abdul SHAKOOR, Ayesha MUSTAFA, Ifra SALEEM, Majid NADEEM.....	757
<b>USE OF THE TERRESTRIAL LASER SCANNER TO ESTIMATE BIOMASS PRODUCTION IN HYBRID POPLAR CROPS</b>	
Iulian Constantin DĂNILĂ.....	758
<b>EVALUATION OF RELEVANT MINERAL CONTENTS OF MEDICINAL WILD-GROWN MUSHROOM <i>GANODERMA LUCIDUM</i> FROM DIFFERENT ROMANIAN AREAS</b>	
Miruna-Florentina POPA, Oana DANCI, Cristian BANCIU, Gabriel-Mihai MARIA, Simona OANCEA .....	759
<b>DETERMINATION OF SPRUCE (<i>PICEA OBOVATA</i> LEDEB.) TRUNK DIAMETER BASED ON STUMP DIAMETER IN DIFFERENT BOREAL CONIFEROUS FOREST CONDITIONS OF PERMSKII KRAI</b>	
Aleksandr ROMANOV, Andrey ANTIPIN.....	760
<b>FLORISTIC COMPOSITION COMPARISON BETWEEN AUSTRIAN PINE FORESTS OF ZLATIBOR AND KOPAONIK (SERBIA)</b>	
Marijana NOVAKOVIĆ-VUKOVIĆ, Rajko MILOŠEVIĆ .....	761
<b>COMPARATIVE ANALYSIS OF FLORISTIC COMPOSITION OF HUNGARIAN OAK AND TURKEY OAK FORESTS ON TWO LOCALITIES IN SERBIA</b>	
Marijana NOVAKOVIĆ-VUKOVIĆ, Rajko MILOŠEVIĆ, Marko PEROVIĆ.....	762
<b>TAXONOMICAL PROPERTIES OF GREEK MAPLE (<i>ACERHELDREICHII</i> ORPH.) ON JAHORINA MOUNTAIN IN BOSNIA AND HERZEGOVINA</b>	
Nikola ZORANOVIĆ, Marko PEROVIĆ, Rade CVJETIĆANIN.....	763
<b>THE CYNIPID GALL WASPS FAUNA ON PEDUNCULATE OAK IN THE SEED ORCHARD IN SREMSKA MITROVICA (SERBIA)</b>	
Milan DREKIĆ, Leopold POLJAKOVIĆ- PAJNIK, Saša ORLOVIĆ, Branislav KOVAČEVIĆ, Marina MILOVIĆ, Andrej PILIPOVIĆ.....	764
<b>ANALYSIS OF THE ECOLOGICAL-CENOLOGICAL RELATION AND VITALITY OF ARTIFICIALLY RAISED STANDS OF ASH AND BLACK PINE IN PROTECTIVE FOREST IN VICINITY OF BELGRADE (SERBIA)</b>	
Rajko MILOŠEVIĆ, Marijana NOVAKOVIĆ-VUKOVIĆ, Milan BIĆANIN .....	765
<b>NON-LINEAR MODELS APLICATIONS IN RADIAL GROWTH PREDICTION STUDIES, BASED ON CLIMATE SCENARIOS: GENERALIZED ADDITIVE MIXED MODEL (GAMM) APPROACH</b>	
Saša KOSTIĆ, Saša ORLOVIĆ, Lazar KESIĆ, Martina ZORIĆ, Stefan STJEPANOVIĆ, Dejan B. STOJANOVIĆ.....	766



<b>EUGLEY SOIL OF FLOODPLAIN AND PROTECTED PART OF ALUVIAL PLANE AND POSSIBILITIES OF THEIR FORESTATION</b>	
Saša PEKEČ, Andrej PILIPOVIĆ, Marina MILOVIĆ, Velisav KARAKLIĆ .....	767
<b>COMPARISON OF THE GROUND VEGETATION IN DOUGLAS-FIR ARTIFFICIALY ESTABLISHED STANDS AND NATURAL MIXED BEECH AND SESSILE OAK FOREST IN THE AREA OF KOSMAJ (SERBIA)</b>	
Snežana STAJIĆ, Vlado ČOKEŠA, Zoran MILETIĆ, Saša EREMIJA, Miroslava MARKOVIĆ ..	768
<b>WATER SUPPLY EFFECT ON PHYSIOLOGICAL STATUS OF MANAGED AND UNMANAGED PEDUNCULATA OAK (<i>QUERCUS ROBUR</i> L.) STANDS IN RELATION TO RIVERBED DISTANCE</b>	
Srdan STOJNIĆ, Mirjana BOJOVIĆ, Saša ORLOVIĆ, Dejan B. STOJANOVIĆ, Saša KOSTIĆ, Lazar KESIĆ, Matjaž ČATER.....	769
<b>THE CHAOTIC WHEAT PRODUCTION GROWTH MODEL: CHINA</b>	
Vesna JABLANOVIC.....	770
<b>MORPHOLOGICAL CHARACTERISTICS AND VARIABILITY OF THE SEEDLINGS OF WILD CHERRY (<i>PRUNUS AVIUM</i> L.) IN SERBIA</b>	
Vladan POPOVIĆ, Ljubinko RAKONJAC, Ivica LAZAREVIĆ, Aleksandar LUČIĆ.....	771
<b>VARIABILITY OF MORPHOMETRIC CHARACTERISTICS OF SESSILE OAK (<i>QUERCUS PETRAEA</i> (MATT.) LIEBL) ACORN</b>	
Vladan POPOVIĆ, Aleksandar LUČIĆ, Sanja JOVANOVIĆ, Ljubinko RAKONJAC .....	772
<b>SOCIO ECONOMIC STATUS &amp; AGROFORESTRY READINESS: A CASE STUDY OF SELECTED COMMUNITIES IN THE OR TAMBO DISTRICT, EASTERN CAPE IN SOUTH AFRICA</b>	
Phokele MAPONYA, Dean OELOFSE, Casper MADAKADZE, Nokwazi MBILI, Zakheleni DUBE, Thabo NKUNA, Meshack MAKHWEDZHANA, Takalani TAHULELA , Kgosi MONGWAKETSI .....	773
<b>SUITABILITY OF WOOD OF NATIVE OAK SPECIES (<i>QUERCUS</i> spp.) FROM THE IBERIAN PENINSULA NORTHWEST FOR COOPERAGE</b>	
Ignacio J. DIAZ-MAROTO .....	774
<b>CERTIFICATION SYSTEM FOR SUSTAINABLE FOREST MANAGEMENT OF CORK TREE (<i>QUERCUS SUBER</i> L.) FORESTS</b>	
Ignacio J. DIAZ-MAROTO .....	775
<b>DETERMINATION OF <i>SALVIA OFFICINALIS</i> L. VOLATILE CONSTITUENTS BY SPME METHOD</b>	
Musa TÜRKMEN .....	776
<b>CHANGE OF ESSENTIAL OIL RATIO AND COMPONENTS OBTAINED BY DIFFERENT METHODS IN LAUREL AND MYRTLE PLANTS</b>	

Musa TÜRKMEN, Oğuzhan KOÇER .....	777
<b>ENERGY POTENTIAL OF THE WHITE MULBERRY WASTE BIOMASS</b>	
Jakub FRANKOWSKI, Małgorzata ŁOCHYŃSKA, Joanna GRZEŚKOWIAK.....	778
<b>AUTHOR INDEX .....</b>	<b>779</b>

## HYDROXYCINNAMICACID DERIVATIVES: POTENTIAL ANTIOXIDANTS IN RARE GROWN *ALLIUM* SPECIES FROM SERBIA

Sandra VUKOVIĆ<sup>1\*</sup>, Đorđe MORAVČEVIĆ<sup>1</sup>, Jelica GVOZDANOVIĆ-VARGA<sup>2</sup>, Ilinka PEĆINAR<sup>1</sup>, Ana VUJOŠEVIĆ<sup>1</sup>, Sofija KILIBARDA<sup>1</sup>, Danijel D. MILINČIĆ<sup>1</sup>, Stefan GORDANIĆ<sup>3</sup>, Dragoljub PAVLOVIĆ<sup>4</sup>, Aleksandar Ž. KOSTIĆ<sup>1</sup>

<sup>1</sup>University of Belgrade, Faculty of Agriculture, Nemanjina 6, Zemun, Belgrade, Serbia

<sup>2</sup>Institute of Field and Vegetable Crops, Maksima Gorkog 30, Novi Sad, Serbia

<sup>3</sup>Institute for Medicinal Plant Research "Dr Josif Pančić", Tadeuša Koščuška 1, Belgrade, Serbia

<sup>4</sup>Elixir Zorka – Mineral fertilizers production, Bulevar Oslobođenja 79, Novi Sad, Serbia

\*Corresponding author:sandra.vukovic@agrif.bg.ac.rs

### Abstract

The modern lifestyle imposes the need to discover and introduce foodstuffs that have nutritional and medicinal value into the food chain. The genus *Allium* includes a great number of species. The most studied species are onion, garlic and leek, for which there is evidence of beneficial effects on human health. Investigation of other, rare grown species of this genus, offers the possibility of expanding the range of food to vegetable species with potentially enriched chemical composition. Bearing in mind that the antioxidant properties of food are an important parameter of its quality, this paper aimed to examine the content of hydroxycinnamic derivatives (HCAs), as natural antioxidants, in two *Allium* species - *A. schoenoprasum* (chives) and *A. nutans* (blue chives), grown under different foliar application of selenium - Se (0, 10, 20, 30 g per ha). The total HCAs content was determined by spectrophotometric method, measured the absorbance at 525 nm. The obtained results are expressed as mg equivalent of chlorogenic acid (CGAE) per g of fresh weight. HCAs was in range 0.18 to 0.39 mg/g CGAE for *A. schoenoprasum*, and from 0.18 to 0.94 mg/g CGAE for *A. nutans*. The presence of HCAs indicates the potential antioxidant activity of the investigated species and justifies further detailed research with the aim of identifying other bioactive components that manifest beneficial effects on human health.

**Key words:** *Allium nutans*, *Allium schoenoprasum*, antioxidant properties, HCAs.