

SUSTAINABLE AGRICULTURE - NEW STRATEGIES FOR INCREASING GROWTH AND DEVELOPMENT OF CROPS

International Conference

Honorary Patronage of the JM Rector of the
University of Life Sciences in Lublin prof. dr hab. dr h.c. Krzysztof Kowalczyk

14-17 May 2024, Urszulin, Poland

PROGRAMME

Conference venue: **Hotel DROB Lubelska 4A, 22-234 Urszulin, Poland**

14 May 2024

15.00 – Hotel accommodation

18.00 – Dinner

15 May 2024

7.00 - 8.30 – Breakfast

8.00 – 8.55 - Registration

9.00 - 9.15 – Open of the conference

9.15 - 11.00 – I session of plenary presentations and discussion

Chairmen: Michał Świeca, Jan Bedrniček

The Role of Biostimulants Based on Phosphite in Plant Protection. *Marcelo Carmona, Francisco Sautua, Maria Cecilia Perez Pizá*

Practical Use of Entomopathogenic and Mycoparasitic Fungi in the Agriculture or Forest Ecosystems. *Andrea Bohatá, Jana Lencová, Kristýna Perná, Ewumi Azeez Folorunso, Pavel Olšan, Zbyněk Havelka, Sławomir Kocira, Maria Cecilia Perez Pizá, Pavol Findura, Petr Bartoš*

Biomolecules Inducers of Immunity: Mechanisms and Crosstalk with Biotic Stress Responses. *Sebastian Asurmendi, Raul Andres Cuello, Laura Inés Ramos, Marcelo Carmona, Carlos Augusto Manacorda*

11.00 - 11.15 – Coffee break

11.15 - 13.00 – II session of plenary presentations and discussion

Chairmen: Renata Różyło, František Lorenc

Quick and Effective Evaluation Methods for Biocontrol Agents and Biostimulants Against Phytopathogenic Fungi and Oomycetes in Extensive Crops. *Francisco Jose Sautua, Maria Cecilia Perez Pizá, Marcelo Anibal Carmona*

Assessment of the Quality of Operation of an Autonomous Orchard Sprayer. *Stanisław Parafiniuk, Łukasz Kopiński, Jacek Ogrodniczek, Paweł Karpiński*

The Use of Multispectral Cameras in Agriculture. *Paweł Karpiński*

13.30 - 14.30 – Lunch

15.30 - 17.00 – I presentations session and discussion

Chairmen: Paweł Sobczak, Marcelo Carmona

The Effect of Biostimulation on Soil Condition Change. *Pavol Findura, Miroslav Pristavka, Ingrida Kosiciarova, Zuzana Bajusova, Sławomir Kocira, Maria Cecilia Perez Piza, Stanisław Parafiniuk, Andrea Bohata, Maksym Stankevych*

Qualitative Analysis of Bioactive Compounds and Antioxidant Potential of Horsetail, Rosehip and Soapwort Aqueous Extracts. *František Lorenc, Marketa Jarošová, Jan Bedrniček, Adéla Stupková, Pavel Olšan, Kristýna Perná, Jana Lencová, Sławomir Kocira, Michal Świeca, Andrea Bohatá*

Isoflavones in Soy (*Glycine max* (L.) Merr.) Function, Biological Activities and Possibilities of Increasing its Content. *Jan Bedrniček, Eva Petrášková, František Lorenc, Marketa Jarošová, Kristýna Perná, Adéla Stupková, Jana Lencová, Andrea Bohatá, Michal Świeca, Sławomir Kocira*

Gene Expression Changes Occurring in Soy Plants in Response to Biostimulant Applications. *Magdalena Sozoniuk, Świeca Michal, Andrea Bohatá, Jan Bedrniček, František Lorenc, Sławomir Kocira*

Nano-Cu Potential in *Hordeum vulgare* Foliar Fertilization During Cu Starvation: The Insight into the Changes in Cu Homeostasis Genes Expression Patterns. *Magdalena Kusiak, Magdalena Sozoniuk, Krzysztof Kowalczyk, Izabela Joško*

Effect of Asahi SL Biostimulant Application on Physical Parameters of Soybean Seeds. *Artur Przywara, Kamila Klimek*

17.00 – 17.15 – Coffee break

17.15 - 18.45 – II presentations session and discussion

Chairmen: Pavol Findura, Magdalena Sozoniuk

Polyphenolic Profile, Basic Physicochemical and Health-Promoting Properties of Fruits of Ten Haskap Berry Cultivars (*Lonicera caerulea* var. *Kamtschatica* Sevest.) Grown in Poland. Natalia Żurek, Ireneusz Kapusta

Molecular Determinants of the Bolting Occurrence in Sugar Beet. Michał Nowak, Tomasz Ociepa, Adam Sitariski, Justyna Leśniowska-Nowak, Karolina Różaniecka, Krzysztof Kowalczyk

Alternative Methods for Improving Low-Processed Food Chain. Michał Świeca, Małgorzata Sierocka

Utilization of Oilseed Cake Flour From Minor Oilseeds. Markéta Jarošová, František Lorenc, Jan Bárta, Eva Jarošová, Veronika Bártová

Water Quality Assessment for Sustainable Development Systems. Luiza Kubisiak-Banaszkiewicz, Wioletta Żukiewicz-Sobczak, Agnieszka Starek-Wójcicka, Paweł Sobczak

Artificial Intelligence in reducing plant protection chemicals. Łukasz Kopiński

19.30 - 24.00 – Gala dinner

16 May 2024

7.30 - 9.30 – Breakfast

10.00 - 13.00 – Field trip (Experimental Plant for Variety Evaluation in Uhnin)

13.30 - 14.30 – Lunch

15.30 - 16.30 – IIIA presentations session and discussion – Sala A

Chairmen: Dariusz Góral, Andrea Bohatá

Particle Size, Color, Spectral Characteristics and Antioxidant Activity of Micronized Rose Flower Petal Powders. Renata Różyło, Ryszard Amarowicz, Michał Adam Janiak, Marek Domin, Sławomir Gawłowski, Klaudia Rząd, Igor Różyło, Arkadiusz Matwijczuk

Mechanical Behaviour Of Cylindrical Apple Samples Under Different Loading Conditions. Zbigniew Stropiek

Investigating the Effect of Tractor's Tire Parameters on Soil Compaction. Maciej Sprawka, Mariusz Szymanek

Possibility of Using Iron Nanoparticles for the Production of Food Packaging. Małgorzata Góral-Kowalczyk, Dariusz Góral

15.30 - 16.30 – IIIB presentations session and discussion – Sala B

Chairmen: Sławomir Kocira, Maksym Stankevych

Strategy for the green transformation of agricultural policy in the European Union. *Agnieszka Dudziak, Andrzej Kuranc, Tomasz Słowik*

Effect of lack of isothermal packaging during transportation by consumers of frozen food on its thawing. *Dariusz Góral, Małgorzata Góral-Kowalczyk, Piotr Nakonieczny*

Impact of digestate application as a fertilizer on the yield and quality of winter rape seed. *Milan Koszel, Małgorzata Szwed*

Friction parameters of soaps with the addition of graduated hazelnut shells. *Jacek Mazur, Monika Wójcik, Marian Panasiewicz, Paweł Sobczak, Renata Różyło, Sławomir Obidziński*

Effect of Chimney Draft on Emissions From Pellet Fuel-Fired Boilers. *Grzegorz Zajac, Jacek Gładysz, Joanna Szyszlak-Bargłowicz*

16.30 - 16.45 – Coffee break

16.45 - 17.45

IVA presentations session and discussion – Sala A

Chairmen: Stanisław Parafiniuk, Miroslav Pristavka

Use of Agricultural by-Products for Energy Purposes in The Aspect of Reducing Greenhouse Gas Emissions. *Artur Kraszkiewicz*

Evaluation of the Impact of Tractor Field Works on Changes in Selected Physicochemical Properties of Engine Oils. *Wojciech Gołębiowski, Grzegorz Zajac*

The Use of Ultrasound in The Production of Ice Cream With Oleogel Based on Sesame Seed Oil. *Sybilla Nazarewicz, Katarzyna Kozłowicz*

Application Technology and Preliminary Results of Studies on Digestate From the Piaski Biogas Plant. *Małgorzata Szwed, Milan Koszel*

IVB presentations session and discussion – Sala B

Chairmen: Milan Koszel, Artur Przywara

Greenhouse Gases Emissions of the Agricultural Sector and the Safety of Crop in Sustainable Agriculture. Magdalena Kachel, Karolina Sokal

The Effect Of Plow Modification On Drawbar Power Requirement During Ploughing. Maciej Sprawka, Mariusz Szymanek

Investigating the Effect of Tractor's Tire Parameters on Soil Compaction. Maciej Sprawka, Mariusz Szymanek

Analysis of Used Engine Oils From Agricultural Tractors in the Aspect of Their Replacement Times. Grzegorz Zajac, Tomasz Slowik

Potential use of pomace from the selected plant seeds as functional food ingredients. Monika Wójcik, Renata Różyło

17.45 – Summary of the conference

19.00 - 23.00 – Dinner (Barbecue)

17 May 2024

7.30 - 9.30 - Breakfast and closing of the conference

AgroBiosNewGen