



PROGRAMME

59th Croatian and 19th International Symposium on Agriculture



► **SUNDAY, FEBRUARY 11, 2024**

- 15:00 – 18:00 Registration of Participants
- 16:00 – 19:00 Pre-symposium Workshop “Green Technologies in Agriculture” – ELAFITI 2 HALL
- 19:00 WELCOME RECEPTION – RECEPTION

► **MONDAY, FEBRUARY 12, 2024**

- 8:30 – 17:30 Registration of Participants

HALL :: ELAFITI 4

- 10:00 – 11:30 Opening Ceremony
- 12:00 – 13:30 Lunch Break
- 13:30 – 16:00 Plenary Lectures
- 16:00 – 16:30 Coffee Break
- 16:30 – 17:30 Round Table – Challenges of Agricultural Land Consolidation in Croatia
- 18:00 – 19:00 Sensory Workshops
- 21:00 Tasting of Traditional Products / Klapa – NOCTURNO BAR

► **TUESDAY, FEBRUARY 13, 2024**

- 08:00 – 17:00 Registration of Participants

Sessions

- 08:30 Agricultural Economics and Rural Development – ELAFITI 2 HALL
- 08:30 Biodiversity Conservation, Genetics and Breeding – ELAFITI 3 HALL
- 08:30 Fisheries, Wildlife Management and Apiculture – ELAFITI 4 HALL
- 11:00 Viticulture, Enology and Pomology – ASIMON HALL

- 14:00 Vegetable Growing, Ornamental, Medicinal and Aromatic Plants – ELAFITI 3 HALL
- 14:00 Crop Production – ELAFITI 4 HALL
- 21:00 Klapa „Kaše“

► **WEDNESDAY, FEBRUARY 14, 2024**

08:00 – 12:00 Registration of Participants

Sessions

- 08:30 Agroecology, Sustainable Agriculture and Climate Change – ELAFITI 2 HALL
- 08:30 Animal Science – ELAFITI 3 HALL
- 08:30 Precision Farming – ELAFITI 4 HALL
- 11:00 Plant Protection – ASIMON HALL
- 14:00 Food, Feed and Quality – ASIMON HALL
- 20:00 GALA DINNER

► **THURSDAY, FEBRUARY 15, 2024**

10:00 EXCURSION

► **FRIDAY, FEBRUARY 16, 2024**

DEPARTURE

► **SUNDAY, FEBRUARY 11, 2024**

Pre-symposium Workshop “Green Technologies in Agriculture”

HALL :: ELAFITI 2

- 16:00 – 16:45 **Marija Duvnjak**
Applied biotechnology in feed production
- 16:45 – 17:30 **Helena Vitoshkin**
Bridging the gaps: Science advances knowledge in vertical farming
- 17:30 – 18:15 **Sergio Saia**
Carbon balance and conservation agriculture: the trade-off among agronomic, environmental and economic needs
- 18:15 – 19:00 **Hrvoje Hegeduš**
The use of sensor technologies in the measurement of soil water content
- 19:00 WELCOME RECEPTION – RECEPTION

► **MONDAY, FEBRUARY 12, 2024**

HALL :: ELAFITI 4

- 10:00 – 11:30 Opening Ceremony SA2024
- 11:30 – 12:00 Coffee Break
- 12:00 – 13:30 Lunch Break

Plenary Session

ELAFITI 4 HALL

Moderators :: Ivica Kisić, Krunoslav Zmaić

- 13:30 **Eric Yirenkyi Danquah**
Impacting food and nutrition security in sub-Saharan Africa (SSA): Training NextGen Plant Breeders for a hungry, growing and changing SSA

- 14:00 **Paweł Konieczka**
Potential of Cannabis-originated products in chicken and turkey nutrition
- 14:30 **S. Luke Flory**
Emerging invasive plant and pathogen threats to biodiversity and agriculture
- 15:00 **Mary Ann Lila**
From disease to depression to dementia: plant-derived compounds provide solutions to enhance human resilience, vitality and healthspan
- 15:30 **Giles E. D. Oldroyd**
Enhancing beneficial microbial associations of plants for sustainable crop production
- 16:00 – 16:30 **Coffee Break**
- 16:30 – 17:30 Round table – Challenges of Agricultural Land Consolidation in Croatia
- 18:00 – 19:00 Sensory Workshops**
- 18:00 – 19:00 **Samir Kalit**
Cheese Tasting and Sensory Workshop – BOKAR HALL
- 18:00 – 19:00 **Ivica Kos**
Dried meat Tasting and Sensory Workshop – DIVONA 1 HALL
- 18:00 – 19:00 **Lidija Svečnjak, Saša Prđun**
Honey Tasting and Sensory Workshop – DIVONA 2 HALL
- 18:00 – 19:00 **Daniel Čečavac**
Wine Tasting and Sensory Workshop – ASIMON HALL
- 21:00 Tasting of Traditional Products / Klapa – NOCTURNO BAR

► **TUESDAY, FEBRUARY 13, 2024**

Session 2 :: Agricultural Economics and Rural Development

HALL :: ELAFITI 2

Moderators :: Ružica Lončarić, Željka Mesić

- 08:30 **Marija Cerjak, Marcin Antoniak, Daniela Šálková et al.**
Modeling predictors of behavior of consumers suffering from food intolerances or food allergies
- 08:45 **Marina Tomić Maksan, Branka Šakić Bobić, Damir Kovačić, Željka Mesić**
Use of the Health Belief Model to examine willingness to use omega-3-enriched eggs
- 08:55 **Željka Mesić, Nikola Vidaković, Katarina Sekulić, Ana Marušić Lisac et al.**
Applying Smart-Contracts to fight Food Fraud in PGI Lika Potatoes
- 09:05 **Jernej Prišenk, Jernej Turk, Ben Moljk, Ivo Grgić, Marin Čagalj, Nejc Zidar**
How would an agri-food chain with added value look like: a theoretical approach based on a case study from Slovenia
- 09:15 **Sara Bele, Ben Moljk**
Comparison of the usefulness of foreign trade data based on partner country and on the country of origin - examples of agri-food products in Slovenia
- 09:25 **Amelia Ahles, Marco A. Palma, Andreas C. Drichoutis**
Consumers' willingness to pay for Criollo meat
- 09:35 **Katarina Marić, Mirta Vulje, Filip Varga, Alen Džidić, Dragica Šalamon**
Open spatial data in animal protein production in Croatia
- 09:45 **Domagoj Šimić, Domagoj Šimić**
Ethical implications of using artificial intelligence in agriculture
- Discussion**
- 10:00 **Coffee Break**

Moderators :: Branka Šakić Bobić, Milan Oplanić

- 10:30 **Ajda Bleiweis, Tanja Travnikar**
Classification and financial analysis of climate change adaptation measures in Slovenian agriculture
- 10:40 **Lulu Pi, Tomislav Vukina**
The impact of mergers of large broiler companies on prices and costs
- 10:50 **Branka Šakić Bobić, Zoran Grgić, Vesna Očić, Krunoslav Zmaić, Danijel Jug**
Economic justification for the use of soil conservation tillage in soybean cultivation
- 11:00 **Tajana Čop, Dijana Pejazić, Mario Njavro**
Mutual fund - risk management strategy in livestock
- 11:10 **Mario Njavro, Lovro Babić, Tajana Čop**
Index Insurance in Agriculture - Current experiences and new knowledges
- 11:20 **Magdalena Zrakić Sušac, Dorotea Blašković, Maja Celizić et al.**
The role of the agricultural advisory service in farm business innovating - the perception of farmers in selected counties
- 11:30 **Tina Lešnik, David Pokupec, Andreja Borec**
The Impact of Riparian Zones along Rivers under the New CAP in Slovenia
- 11:40 **Natalija Vugrin, Morana Jednačak, Ana – Marija Špicnagel**
NOVAFERT project - SWOT and PEST analysis of alternative fertilising products in Continental Croatia

Discussion

Lunch break

Moderators :: Tihana Sudarić, Marina Tomić Maksan

- 14:00 **Doroteja Krivić-Tomić, Jelena Jurišić, Nataša Bokan**
Models of mass communication in the service of the development of rural areas

- 14:10 **Jadranka Deže, Olgica Klepač, Snježana Tolić**
Implementation of social innovations in Croatian peripheral rural areas
- 14:20 **Milan Oplanić, Ana Čehić Marić, Smiljana Goreta Ban et al.**
Models for horticultural farms in Adriatic Croatia to adapt to climate change
- 14:30 **Tihana Sudarić, Krunoslav Zmaić, David Kranjac, Lucija Pečurlić**
Educational opportunities and challenges for the study program Agroeconomics
- 14:40 **Natalija Vugrin**
FERTIMANURE project - development of business models for more sustainable manure management

Discussion

15:00 **Session 2 :: Poster Session**

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Jadranka Deže, Josip Juračak

- 2.1. **Ružica Lončarić, Sanja Jelić Milković, David Pilipović, Jadranka Deže**
Market perspectives of berries in the Republic of Croatia
- 2.2. **Josip Juračak, Andreas Drichoutis, Damir Kovačić, Marija Cerjak**
The influence of production technology and origin on consumer preferences for apples
- 2.3. **David Kranjac, Krunoslav Zmaić, Dragan Solić, Maja Petrač**
Outlook on the pork meat market in the Republic of Croatia using the montly remainder method
- 2.4. **Maja Petrač, Krunoslav Zmaić, David Kranjac, Pero Mijić, Jaka Žgajnar**
The influence of the region on the definition of typical family dairy farms in the Republic of Croatia
- 2.5. **Merima Makaš, Emir Bećirović, Sabahudin Bajramović**
Agricultural policy development of Bosnia and Herzegovina and EU approximation process

- 2.6. **Martin Topljak, Nataša Bokan**
Citizen`s role in energy transition of Križevci Municipality,
Koprivnica-Križevci County, Croatia
- 2.7. **Gabriela Šmit, Ante Ivanković, Lari Hadelan, Carl-Johan Lagerkvist et al.**
Local Istrian breeds as providers of ecosystem services

Session 3 :: Biodiversity Conservation, Genetics and Breeding

HALL :: ELAFITI 3

Moderators :: Marko Maričević, Andrijana Rebekić

- 08:30 **Barbara Pipan, Uroš Benec, Lovro Sinković, Romana Rutar et al.**
Use of molecular methods during the certification procedure: cereals and brassicas example
- 08:45 **Marko Maričević, Ivica Ikić, Katarina Jukić, Domagoj Stepinac et al.**
Genotypic differences in nitrogen use efficiency of winter wheat
- 08:55 **Zvonimir Lalić, Marina Zorić, Luka Drenjančević et al.**
Quantitative and qualitative changes in the yield of winter wheat with regard to the year of recognition
- 09:05 **Antonia Petrić, Zvonimir Lalić, Marina Zorić, Ivan Varnica et al.**
Quality of winter wheat in post-registration trials in the 2022/2023 growing season
- 09:15 **Lovro Vukadinović, Vlatko Galić, Domagoj Šimić**
Hyperspectral responses of maize inbred lines to water withholding
- 09:25 **Andrija Brkić, Zvonimir Zdunić, Miroslav Salaić, Antun Jambrović et al.**
GEI decomposition of yield performance in maize multi-environment trials in Türkiye and Croatia
- 09:35 **Ivana Lisec, Josip Brekalo, Mirko Jukić, Dario Jareš, Ivica Buhiniček et al.**
Testing maize inbred lines and their crosses for resistance to fusarium ear rot

Discussion

- 10:00 **Coffee Break**

Moderators :: Marko Maričević, Andrijana Rebekić

- 10:30 **Andrijana Rebekić, Sonja Petrović, Sonja Vila, Sunčica Kujundžić et al.**
Correlations of micro and macro elements in wheatgrass juice and powder
- 10:40 **Sanja Grubišić Šestan, Sonja Petrović, Miroslav Lisjak et al.**
Variability of Fe and Zn in wheatgrass juice
- 10:50 **Zoran Šikić, Šime Marcelić, Marko Zorica, Ana Gašparović Pinto et al.**
NATURA 2000 and agriculture in the area of Ravni Kotari in Zadar County, state and challenges
- 11:00 **Dora Maričić, Ana-Marija Špicnagel**
LiveSeeding project - Insights into the opportunities and bottlenecks in organic seed and plant breeding sector

Discussion

- 11:20 Book presentation:
Kukuruz: od domestikacije do oplemenjivanja /
Maize: from domestication to breeding
Autor/Author: dr.sc. Andija Brkić

12:00 **Session 3 :: Poster Session**

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Aleš Vokurka, Marko Maričević

- 3.1. **Snježana Bolarić, Luka Ivković, Petar Bašić, Milan Pospišil et al.**
Genetic variability of domestic potato germplasm
- 3.2. **Tjaša Cesar, Zlata Luthar, Nataša Hren, Andreja Škvarč et al.**
Identification of local Slovenian grapevine varieties (*Vitis vinifera* L.) of the Primorska region using SSR markers
- 3.3. **Karolina Kajan, Sunčica Kujundžić, Vedran Orkić, Sonja Petrović et al.**
Coleoptile length and Rht alleles in Croatian wheat varieties

- 3.4. **Snježana Kereša, Darko Vončina, Ivanka Habuš Jerčić et al.**
Elimination of potato virus M and potato virus S from four traditional potato cultivars
- 3.5. **Agnieszka Kiełkowska, Lenka Mačugová**
Trials on anther cultures in *Vicia faba* L.
- 3.6. **Natalija Kravić, Jelena Mesarović, Danijela Ristić, Vojka Babić et al.**
Phenolic acids profiling of drought-tolerant and susceptible maize inbred lines in response to long-term water deficit
- 3.7. **Ivanka Habuš Jerčić, Snježana Kereša, Ivana Tomaz, Kristijan Jambrošić et al.**
The impact of sound on the growth and antioxidant enzymes activity in basil
- 3.8. **Miroslav Salaić, Antun Jambrović, Zvonimir Zdunić, Andrija Brkić et al.**
The application of genomic predictive modeling of combining abilities in the selection of maize breeding lines
- 3.9. **Maja Matoša Kočar, Aleksandra Sudarić, Tomislav Duvnjak et al.**
C3 and C4 photosynthetic performance in cold stress
- 3.10. **Maja Mažur, Vlatko Galić, Antun Jambrović, Aleksandra Sudarić et al.**
Portable spectrometer-based cold stress detection in C3 and C4 plants
- 3.11. **Tihomir Čupić, Marijana Tucak, Dario Novoselović, Goran Krizmanić et al.**
Monitoring drought impact on spectral indices in legumes
- 3.12. **Jelena Musić, Sunčica Kujundžić, Sanja Grubišić Šestan, Sonja Petrović et al.**
Factors affecting preharvest sprouting and wheat seed dormancy
- 3.13. **Ivica Ljubičić, Sandro Bogdanović**
Mapping of the invasive species *Ailanthus altissima* (Mill.) in the area of the Telašćica Nature Park
- 3.14. **Ivana Majić, Siniša Ozimec, Ivan Plaščak, Vlatko Rožac et al.**
An automated remote monitoring system for endangered, protected, and indicator wildlife species in the Nature Park Kopački Rit
- 3.15. **Branko Pucarín, David Kranjac, Siniša Ozimec**
Usage of the IACS measures from the Rural Development Programme for biodiversity conservation in Bjelovar-Bilogora County

Session 6 :: Fisheries, Wildlife Management and Apiculture

HALL :: ELAFITI 4

Moderators :: Marina Piria, Ivan Špelić

- 08:30 **Oliver Barić, Silvia Cukon, Tena Radočaj et al.**
Condition index and infestation of the shell of the oysters, *Ostrea edulis* (Linnaeus, 1758) and *Magellana gigas* (Thunberg, 1793), with the polychaete *Polydora* sp. in the Medulin Bay
- 08:45 **Raoul Filipas, Oliver Barić, Antonio Castelletto et al.**
Morphometric characteristics of bluefish, *Pomatomus saltatrix* (Linnaeus, 1766) population inhabiting North Adriatic Sea
- 08:55 **Juraj Petravić, Mateo Žunac, Zrinka Mesić, Nina Popović, Ratko Popović, Milorad Mrakovčić**
Distribution, length-mass ratio and eustrongylidosis of the roundhead *Neogobius melanostomus* (Pallas, 1814) in the lower reaches of the Kupa River
- 09:05 **Tena Radočaj, Irena Vardić-Smrzlić, Ivan Špelić, Marina Piria, Ana Gavrilović**
Seasonal changes in the prevalence of endoparasite *Pomphorhynchus laevis* in chub *Squalius cephalus* in the Sava River
- 09:15 **Réka Enikő Balogh, Balázs Csorbai, Csaba Guti, Béla Urbányi, Julian Catchen, László Orbán, Balázs Kovács**
Revisiting the sex determination and sexual differentiation of African catfish (*Clarias gariepinus*)
- 09:25 **Jure Brčić, Dalka Zanki, Nika Ugrin, Petar Crmarić, Nikola Rajčić, Bent Herrmann, Mirela Petrić, Svjetlana Krstulović Šifner, Maja Krželj**
Is there a benefit of using hook with an appendage in a small scale coastal Adriatic Sea longline fisheries?
- 09:35 **Ana Gavrilović, Jurica Jug-Dujaković, Tena Radočaj, Damir Kapetanović, Xiaojuan Cao, Dapeng Li, Li Li, Rong Tang**
Assessment of grass carp culture as a candidate for future sustainable aquaculture production in Europe

Discussion

- 10:00 **Coffee Break**

Moderators :: Daniel Matulić, Tena Radočaj

- 10:30 **Ákos Horváth, Jurica Jug-Dujaković, Nevena Kitanović et al.**
Cryopreservation of European flat oyster (*Ostrea edulis*) larvae
- 10:40 **Jurica Jug-Dujaković, Tena Radočaj, Ana Gavrilović**
Invasive species vs. thermophilic species that expand their range
- 10:50 **Balázs Kovács, Réka Enikő Balogh, Balázs Csorbai et al.**
Growth performance of different airbreathing (*Clariidae*) catfish lines
- 11:00 **Daniel Matulić, Mario Lovrinov, Katerina Skelin et al.**
Sustainable management of fisheries and aquaculture discards and side-streams
- 11:10 **Dániel Péter, Réka Enikő Balogh, Balázs Csorbai et al.**
Molecular genetic analyses of growth selected african catfish (*Clarias gariepinus*) lines
- 11:20 **Ivan Špelić, Marina Piria**
Changes in riverine fish communities as a result of renewed rip rap shoreline protection
- 11:30 **Vjekoslav Tičina**
Adriatic sprat in the trap – possible consequences of global warming

Discussion

Moderators :: Lidija Svečnjak, Dragan Bubalo

- 11:50 **Blanka Bilić Rajs, Ljiljana Primorac, Milica Cvijetić-Stokanović et al.**
Contribution to the characterisation of False indigo honey (*Amorpha fruticosa* L.)
- 12:00 **Saša Prđun, Antonio Ribičić, Dubravka Dujmović Purgar et al.**
Botanical origin of the bee pollen in the Maksimir park area
- 12:10 **Lidija Svečnjak, Gloria Ledinski, Saša Prđun, Dragan Bubalo**
Quality of beeswax on the international market
- 12:20 **Marina Kranjac, Elda Vitanović, Maja Veršić Bratinčević et al.**
Chemical diversity of headspace volatiles of selected bee pollen from Croatian flora

12:30

Zvezdana Stančić, Željka Fiket

Pollination research in the flora and vegetation of northern Croatia with utility analysis for *Apis mellifera*

Discussion

Lunch break

14:00

Session 6 :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Ana Gavrilović, Saša Prđun

- 6.1. **Antonio Castelicchio, Oliver Barić, Martina Gelli, Neven Cukrov et al.**
Seasonal video-monitoring of fauna and biodiversity in Martinska bay, a coastal Natura 2000 area near Šibenik
- 6.2. **Gorana Jelić Mrčelić, Marija Brečić, Nikola Kurtin**
Some eco-labelling and certification schemes in fisheries and aquaculture
- 6.3. **Svjetlana Krstulović Šifner, Tea Nedeljković**
Morphometric traits of the common cuttlefish, *Sepia officinalis* Linnaeus, 1758, in the Adriatic Sea
- 6.4. **Vedrana Nerlović, Mario Lobaš, Mario Prečanica, Kruno Bonačić**
Settlement of *Ostrea edulis* on collectors of mussel socks in the southern Adriatic Sea: a pilot study
- 6.5. **Mirjana Karabatić, Mario Prečanica, Ana Bratoš Cetinić et al.**
Settlement of European flat oysters on spat collectors during spawning season of 2022, in Bistrina, Mali Ston bay
- 6.6. **Jelena Kurtović Mrčelić, Josip Boban et al.**
Shellfish fouling community on larvae mesh bag collectors in two Natura 2000 sites, Pantan and Cetina estuary
- 6.7. **Jadranka Sulić Šprem, Tatjana Dobrosravić, Adnan Jažić**
Occurrence of parasit *Hysterothylacium aduncum* (Nematoda: Raphidascarididae) in *Uranoscopus scaber* (Perciformes: Uranoscopidae) from the southern Adriatic Sea

- 6.8. **Damir Ugarković, Nikica Šprem, Branimir Stankić**
Comparison of three different methods for evaluating the mass and volume of roe deer antlers (*Capreolus capreolus* L.)
- 6.9. **Tihomir Florijančić, Neška Vukšić Končevski, Ivica Budor**
African swine fever of wild boar in Europe and Croatia - yesterday, today, tomorrow
- 6.10. **Ivica Stanko, Ivica Budor**
Communicative discourse of hunting
- 6.11. **Neška Vukšić Končevski, Aleksandra Majić Skrbinšek et al.**
Neighbour or enemy: Attitudes of hunters towards the wolf (*Canis lupus* L.) in Croatia
- 6.12. **Tena Radočaj, Andrea Rezić, Tea Tomljanović, Nikica Šprem**
Is the axis deer *Axis axis* (Erxleben, 1777) really an invasive species in Europe?
- 6.13. **Goran Mirjanić, Borut Bosančić, Dijana Mihajlović**
Content of calcium and magnesium in pollen from the area of Eastern Bosnia
- 6.14. **Saša Prđun, Snježana Knežević, Dragan Bubalo, Lidija Svečnjak**
Methods of artificial swarming of honey bee colonies
- 6.15. **Marin Kovačić, Josipa Štavalj, Karolina Tucak, Zlatko Puškadija**
Effect of brood interruption methods on infestation of honey bee (*Apis mellifera* L.) colonies with *Varroa destructor*
- 6.16. **Lea Ceraj-Cerić, Kruno Bonačić, Mario Prečanica, Ana Bratoš Cetinić**
Settlement of benthic organisms on oyster spat collectors in Mali Ston Bay, Adriatic Sea

Session 8 :: Viticulture, Enology and Pomology

HALL :: ASIMON

Moderators :: Toni Kujundžić, Ivan Prša

- 11:00 **Doris Kiseljak, Jelena Miloš Puh, Marta - Martina Mikulić**
Valorization of the 'Plavac mali' variety in the period from 2015 to 2023

- 11:15 **Jelena Puh Miloš, Doris Kiseljak, Marta - Martina Mikulić**
Quantitative and qualitative indicators of the rosé wine market in Croatia: Analysis of trends 2015 - 2023
- 11:25 **Toni Kujundžić, Vladimir Jukić, Mato Drenjančević**
Vine load as an important factor in the quality of must and wine of the Graševina variety
- 11:35 **Iva Šikač, Dragutin Kamenjak, Simona Murković et al.**
Qualitative indicators of grape must suitable for organic production at the Križevci University of Applied Sciences
- 11:45 **Željko Andabaka, Iva Šikuten, Marija Brkljačić et al.**
Influence of viticultural practices on Zlatarica vrgorska and Trnjak grape chemical composition grown in Vrgorac
- 11:55 **Tea Presečki, Marko Dropuljić, Silvio Šimon**
Assessment of storage capacity of Golden Delicious apple variety in Zagreb County

Discussion

12:15 **Session :: Viticulture, Enology and Pomology :: Poster Session**

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Toni Kujundžić, Ivan Prša

- 8.1. **Marina Anić, Mirela Osrečak, Janko Haramina, Marko Karoglan**
Effect of timing of leaf removal on volatile composition and content of *Vitis vinifera* cv. Merlot grapevines
- 8.2. **Stipe Ivić, Ana Jeromel, Ivana Tomaz, Darko Preiner et al.**
Role of non-Saccharomyces yeasts in the aromatic profile of cv. Babić red wines
- 8.3. **Šimun Kolega, Janja Filipi**
Pollination effects on fruit and seed characteristics of 'Golden Delicious' apple trees
- 8.4. **Šime Marcelić, Igor Pasković, Marija Polić Pasković et al.**
Morphological characteristics of the fruit of strawberry tree (*Arbutus unedo* L.) and myrtle (*Myrtus communis* L.) in Zadar county

- 8.5. **Marija Polić Pasković, Paula Pongrac, Nikola Major et al.**
Silicon foliar fertilization modulates oleuropein concentration in olive leaves
- 8.6. **Igor Pasković, Paula Žurga, Valerija Majetić Germek et al.**
Protein hydrolysates as green tools in sustainable olive production
- 8.7. **Martina Skendrović Babojelić, Hrvoje Babić, Jana Šic Žlabur et al.**
Variability of pomological and physico-chemical properties of fruits of different apple cultivars from the Zagreb County
- 8.8. **Slavica Todić, Mina Vereš, Maja Natić, Milica Pantelić, Vera Rakonjac**
Grape berry quality parameters of Prokupac variety - Comparison between biodynamic and conventional management
- 8.9. **Stanko Vršič, Oliver, Trapp;Erika, Maul; Franco, Röckel; Andrej Perko**
Monitoring and genetic characterization of local grapevine varieties (*V. vinifera* ssp.) from Styria in Slovenia
- 8.10. **Kristina Batelja Lodeta, Mihaela Rukavina, Aleš Vokurka et al.**
Influence of agro-ecological factors and pomotechnical measures on apple fruits
- 8.11. **Josip Mesić, Hrvoje Pavlović, Anita Pichler, Ivana Ivić et al.**
The influence of wine aging on sensory characteristics of ‘Graševina’ Pavlović
- 8.12. **Vera Rakonjac, Maja Natić, Milica Pantelić, Slavica Todić**
Phenolic compounds evaluation in wines of Serbian autochthonous and local grapevine varieties
- 8.13. **Domagoj Stupić, Tomislav Mikulčić, Željko Andabaka et al.**
Investigation of the generative potential of the grape varieties ‘Graševina’ and ‘Kraljevina’

14:00

HALL :: ASIMON

The monograph presentation: „Chlorophyll a Fluorescence Measurements in Croatia – First Twenty Years“

Editors: Prof. dr. sc. Hrvoje Lepeduš, Dr. sc. Marija Viljevac Vuletić, prof. dr. sc. Zvonimir Zdunić

Session 4 :: Vegetable Growing, Ornamental, Medicinal and Aromatic Plants

HALL :: ELAFITI 3

Moderators :: Sanja Radman, Dubravka Dujmović Purgar, Nevena Opačić

- 14:00 **Nina Išić, Branka Salopek-Sondi, Mirta Tkalec, Nataša Bauer et al.**
Collecting and preservation of *Brassica incana* Ten. accessions from south Croatia
- 14:15 **Zoran Užila, Nikola Major, Igor Palčić, Tvrtko Karlo Kovačević et al.**
Impact of cultivation technology on the glucosinolate profile of kale microgreens (*Brassica oleracea* L. var. *acephala*)
- 14:25 **Sanja Radman, Jana Šic Žlabur, Antonija Zurak, Sanja Fabek Uher, et al.**
Organic fertilization effects on chemical composition and morphological traits of cultivated nettle
- 14:35 **Nevena Opačić, Sanja Fabek Uher, Božidar Benko, Nina Toth et al.**
Microelement content in hydroponically cultivated nettle (*Urtica dioica* L.) under varied irrigation intervals
- 14:45 **Dunja Šamec, Iva Jurčević Šangut, Marija Kovač Tomas et al.**
Biological activity and biflavone content of ginkgo (*Ginkgo biloba* L.) – ornamental, medicinal and food plant
- 14:55 **Domagoj Šmidt, Ivan Širić**
Amanita muscaria (L.) Lam. - a mushroom with unused pharmacological potential
- 15:05 **Dubravka Dujmović Purgar, Jana Šic Žlabur, Anamarija Peter et al.**
LIFE OrnamentalIAS - new project in Croatia

Discussion

- 15:30 **Coffee Break**

16:00

Session 4 :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Zoran Užila, Mihael Kušen, Nina Išić

- 4.1. **Nataša Romanjek Fajdetić, Anđa Zeba, Ljiljana Božić-Ostojić et al.**
The influence of the growing medium on the growth of *Capsicum annuum* L.
- 4.2. **Ljiljana Božić-Ostojić, Matija Mirković, Nataša Romanjek Fajdetić et al.**
Utjecaj načina uzgoja na vegetativna i generativna svojstva graška (*Pisum sativum* L.)
- 4.3. **Nina Toth, Matija Novak, Lepomir Čoga, Nevena Opačić, Sanja Radman et al.**
Mogućnosti uzgoja matovilca u plutajućem hidroponu u proljetno-ljetnom razdoblju
- 4.4. **Sanja Fabek Uher, Gabrijel Antonina, Nina Toth, Jana Šic Žlabur et al.**
The effect of nutrient solution concentration on the yield and bioactive compounds content of hydroponically grown wild rocket
- 4.5. **Monika Vidak, Dijana Čeh, Ivica Budor et al.**
The impact of biostimulants application during vegetation on pepper seeds germination
- 4.6. **Marko Vinceković, Slaven Jurić, Kristina Vlahoviček Kahlina et al.**
Influence of microalgae microparticles on the chemical composition of tomato fruits in hydroponic cultivation
- 4.7. **Péter Ragályi, Péter Dobosy, Gyula Záray, Anita Szabó, Zdenko Lončarić et al.**
Se content in fresh edible parts of vegetables as a result of Se-enriched irrigation
- 4.8. **Eva Smolnikar, Vida Žnidaršič Pongrac, Kristina Ugrinović**
Effects of different soil amendments on Cd content in garlic
- 4.9. **Nikola Major, Tvrtko Karlo Kovačević, Nina Išić, Dean Ban et al.**
Changes in phenolic content and antioxidant capacity during processing of black garlic (*Allium sativum* L.)

- 4.10. **Tatjana Prebeg, Mihael Kušen, Jana Šic Žlabur, Katarina Kuzmec et al.**
Assessing leaf functional traits of *Salvia farinacea* Benth. under deficit irrigation
- 4.11. **Mihael Kušen, Katarina Kuzmec, Monika Zovko, Vesna Židovec, Tatjana Prebeg**
Effects of deficit irrigation on ornamental traits of *Salvia farinacea* Benth
- 4.12. **Mara Marić, Jana Anić, Ana Auguštin, Maša Barbić, Dora Bazjak et al.**
Non-native plant species in the Croatian nursery production

Session 5 :: Crop Production

HALL :: ELAFITI 4

Moderators :: Marina Brčić, Željko Jukić, Filip Horvat

- 14:00 **Lóránt Szőke, Brigitta Tóth**
Effect of biotic stress on antioxidant enzyme activities and malondialdehyde content of sweet maize (*Zea mays* L.)
- 14:15 **László Zsombik, Vivien Pál**
Evaluation of plant parameters and forecrop effect of common vetch (*Vicia sativa* L.) under different agrotechnical conditions
- 14:25 **Luka Drenjančević, Antonia Petrić, Tibor Heđi et al.**
Effect of period of application and amount of nitrogen fertilizer on the protein content of wheat grain in vegetation 2022/2023 year
- 14:35 **Filip Horvat, Dario Iljkić, Goran Jukić, Krešimir Šunjić et al.**
Yield and hectolitre mass of wheat grain (*Triticum aestivum* L.) under the influence of weather conditions over a multi-year period
- 14:45 **Đuro Lukić, Kristijan Puškarić, Domagoj Milas**
BC maize hybrids yield in performance trials in 2023
- 14:55 **Marina Zorić, Tibor Heđi, Zvonimir Lalić, Antonija Petrić, Luka Drenjančević**
The influence of the environment on the yield and quality of sugar beet in VCU trials
- 15:05 **Antonio Barić, Igor Kovačev, Nikola Bilandžija et al.**
Breakage susceptibility of maize kernel as a function of moisture content

Discussion

15:30

Coffee Break

16.00

Session 5 :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Marina Brčić, Željko Jukić, Filip Horvat

- 5.1. **Oqba Basal, Mawia Sobh, Tahoorah Batool Zargar et al.**
Evaluating some morphological traits of 3 chickpea varieties under rainfed conditions in Debrecen, Hungary
- 5.2. **Magdalena Serafin-Andrzejewska, Agnieszka Lejman et al.**
The effect of different soil types on chickpea yield under conditions in south-western Poland - a preliminary research
- 5.3. **Péter Makleit, Szilvia Veres**
Self-defence of wheat (*Triticum aestivum* L.) and maize (*Zea mays* L.) – Different strategies
- 5.4. **Aneta Cholakova, Tsenka Zhelyazkova, Mariya Gerdzhikova**
Influence of sowing rate, nitrogen fertilization rate and harvesting phase on the productivity of teff
- 5.5. **Nikola Kotlárová, Pavol Eliáš, Ľuba D'urišová et al.**
Morphometric analysis of the stomatal apparatus of selected species of weedy grasses: a possible way for determination?
- 5.6. **Marina Brčić, Milan Pospíšil, Željko Jukić, Ana Pospíšil et al.**
Influence of seeding density and sowing date on agronomic properties of *Camelina sativa* L.
- 5.7. **Marina Brčić, Milan Pospíšil, Ana Pospíšil et al.**
Agronomic properties of brown mustard (*Brassica juncea* L.) in dependency on seeding density
- 5.8. **Ivan Horvatić, Zlatko Svečnjak, Dubravko Maćešić et al.**
Influence of intercropping maize with climbing bean on forage yield and nutrient composition of silage

- 5.9. **Goran Kiš, Luka Drenjančević, Nataša Pintiћ Pukec et al.**
Influence of nitrogen fertilization on production parameters and mycotoxin contamination of spring barley
- 5.10. **Luka Brezinščak, Mario Shihabi, Luka Drenjančević**
Yield and protein content of spring barley as affected by nitrogen topdressing

► **WEDNESDAY, FEBRUARY 14, 2024**

Session: 1 :: Agroecology, Sustainable Agriculture and Climate Change

HALL :: ELAFITI 2

Moderators :: Željka Zgorelec, Damir Ugarković, Valentina Pidlisnyuk

- 08:30 **Marta Pogrzeba, Jacek Krzyżak, Alicja Szada-Borzyszowska et al.**
Self-sustainable, smart module for city green infrastructure in climate change adaptation – Mod4GrIn project in theory and practice
- 08:45 **Mirna Habuda-Stanić**
Recycled water and agriculture - solution or problem?
- 08:55 **Zrinka Mesić, Nina Popović, Marko Ožura, Ivona Žiža, Nela Jantol**
Invasive alien species on the abandoned agricultural land
- 09:05 **David Pokupec, Tina Lešnik, Andreja Borec**
Agroecological principles in aquaculture: a case study from East Africa
- 09:15 **Damir Ugarković, Mateja Džeko, Ivica Tikvić**
Comparison of methods for calculating potential evapotranspiration in different climate types in Croatia
- 09:25 **Valentyna Pidlisniuk**
Developing an advanced *Miscanthus x giganteus* phytotechnology for post-military land revitalization
- 09:35 **Tatyana Stefanovska, Valentina Pidlisnyuk, Andrzej Skwiercz**
Assessment of nematodes as bioindicators of soil health in integrating *Miscanthus x giganteus* phytotechnology

09:45 **Željka Zgorelec, Lana Zubčić, Silva Žužul, Zorana Kljaković-Gašpić et al.**

Soil amendments influence on cadmium and mercury phytoremediation using energy crop *Miscanthus x giganteus*

Discussion

10:00 **Coffee Break**

Moderators :: Aleksandra Perčin, Zdenko Lončarić, Jelena Lončar

10:30 **Ferdo Bašić**

With soil from agricultural to applied life sciences: Basic soil map of Croatia sixty years later

10:40 **Ivona Žiža, Dragan Bukovec, Lea Petohleb, Vladimir Kušan**

Summer surface temperatures of agricultural crops in the agro-ecological regions of the Republic of Croatia under current climatic conditions

10:50 **Viktor Simončić, Gregor Radišić, Predrag Umičević**

Innovative biodegradable waste treatment technology: case study with sludge from wastewater treatment plants

11:00 **Daniel Rašić, Hrvoje Hefer, Milena Andrišić, Domagoj Mikulić, Inge Lazar et al.**

Prediction and visualization of phosphorus, potassium and humus in Osijek-Baranja County

11:10 **Ivana Zegnal, Hrvoje Hefer, Milena Andrišić, Daniel Rašić et al.**

Introduction to proficiency testing and quality control in analytical laboratory for soil fertility

11:20 **Kristijan Konopka, Vesna Jurkić, Sanja Slunjski, Ivan Pavlović et al.**

Development of an MIP-OES method for determining total microelement and heavy metal content in soils

11:30 **Ivana Rajnović, Helena Senko, Anastazija Huđ, Sanja Kajić et al.**

Impact of waterlogging stress on soil microorganism

11:40 **Irina Tanuwidjaja, Lucija Princic, Johanna Brutscher, Konrad Domig et al.**

Cave microbes - undercover biocontrol agents

- 11:50 **Ana Gašparović Pinto, Karolina Vrandečić, Josipa Puškarić et al.**
Influence of *Trichoderma atroviride* on the biodiversity of nematode community in olive groves

Discussion

Lunch break

Moderators :: Danijel Jug, Ivana Šestak, Igor Bogunović

- 14:00 **Mihaela Šatvar Vrbancić, Marko Petek, Tomislav Karažija, Željko Jukić et al.**
Correlation between nitrogen and chlorophyll content in maize (*Zea mays* L.) leaves
- 14:10 **Vivien Pál, László Zsombik**
Effect of different green manure strategies on the yield of maize
- 14:20 **Igor Bogunovic, Ivan Dugan, Marija Galic, Luka Brezinscak, Aleksandra Perin**
Soil quality across different land use in a peri-urban area of Zagreb (Croatia)
- 14:30 **Bojana Brozović, Irena Jug, Boris Đurđević, Marija Ravlić, Iva Rojnica et al.**
Influence of conservation tillage and fertilization on weed infestation in soybean
- 14:40 **Ivan Dugan, Paulo Pereira, Manuel Maticic, Ivica Kisic, Igor Bogunovic**
Analyzing soil erosion dynamics in permanent plantations in Croatia: Examining the influence of management, geography, and soil typology
- 14:50 **Boris Đurđević, Irena Jug, Bojana Brozović, Vedran Znamenacek, Danijel Jug**
Does conservation tillage, in synergy with liming and fertilization, can affect selected soil properties?
- 15:00 **Marija Galić, Darija Bilandžija, Irena Jug, Danijel Jug, Željka Zgorelec**
Carbon dioxide emissions from the soil in winter wheat (*Triticum aestivum* L.): effects of soil management

15:10 **Manuel Maticic, Ivan Dugan, Ivica Kisic, Kristina Kljak, Igor Bogunovic**

Three-year investigation of tillage and organic amendment management on the crop and biomass yields in Croatia

Discussion

15:30 **Coffee Break**

16:00 **Session 1 :: Poster Session**

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Jasna Savić, Marko Petek, Ivana Rajnović

- 1.1. **Violina Angelova, Hristo Djygalov**
The effect of soil contamination on the chemical composition of goji berry (*Lycium Chinese*) fruits
- 1.2. **Darija Bilandzija, Dija Bhandari, Stella Arlovic, Marija Galic et al.**
Influence of biomass ash fertilization on soil pH, CaCO₃, K₂O and P₂O₅ under *Miscanthus x giganteus*
- 1.3. **Edward Rodriguez, Graça Brito, Manuela Ribeiro, Nuno Carvalho et al.**
Development of a GIS model for mapping soil water erosion in cork oak groves in Portugal
- 1.4. **Katarina Kruščić, Mihailo Nikolić, Milan Gavrilović, Pedja Janačković et al.**
Characterization of plant growth-promoting seed-borne endophytes, associated with mustard, basil, and lettuce seeds
- 1.5. **Rey Mark Faderogao, Miklós Gulyás, Dario Novoselović, Boris Lazarević**
Effect of nitrogen, phosphorous, and potassium deficiency on winter wheat root morphology
- 1.6. **Adrijana Filipović, Višnja Vasilj, Ana Mandić, Barbara Penavić, Iva Ivanković**
Rapid methods for assessing the efficiency of chickpea bacterization

- 1.7. **Ranko Gantner, Igor DelVechio, Zvonimir Steiner, Bishal K. Sitaula et al.**
Presenting the concept of low-input farming to Croatian agronomic community
- 1.8. **Dora Maričić, Martina Grdiša, Željka Zgorelec, Mirna Mrkonjić Fuka**
The potential of medicinal and aromatic plants in the phytoremediation of heavy metal contaminated sites
- 1.9. **Mihajlo Marković, Nataša Čereković, Đurađ Hajder, Milan Šipka et al.**
Smart management of land and water resources in agriculture in Bosnia and Herzegovina: implementation of H2020 SMARTWATER project
- 1.10. **Nataša Hulak, Adela Zumaquero Jiménez, José Sebastián Rufián Plaza et al.**
Spray inoculation of *Pseudomonas syringae* pv. tomato on *Arabidopsis thaliana* mutants impaired in methylation
- 1.11. **Tomislav Javornik, Boris Lazarević, Monika Vidak, Klaudija Carović-Stanko**
Influence of gamma radiation on traditional common bean landraces
- 1.12. **Danijel Jug, Irena Jug, Boris Đurđević, Edward Wilczewski et al.**
Spatial and temporal variability of soil compaction on different conservation tillage treatments
- 1.13. **Sanja Kajić, Sara Vignjević, Sanja Sikora, Ivana Rajnović**
Isolation and characterization of plant growth promoting rhizobacteria and their potential role in bioremediation
- 1.14. **Sofia Kapeni, Apolka Ujj, Lidija Svečnjak, Ivica Kos, Ivana Šestak et al.**
Fingerprinting of soil organic matter composition by FTIR-ATR spectroscopy
- 1.15. **Marija Kristić, Vladimir Zebec, Jurica Jović, Meri Engler, Vladimir Ivezic**
The influence of seaweed on soil respiration
- 1.16. **Paulo Legoinha, Diana Daccak, Cláudia Pessoa, Inês Carmo Luís et al.**
Influence of the parent rock on “Montado” soils in three locations of Portugal

- 1.17. **Fernando C. Lidon, Diana Daccak, Cláudia Pessoa, Inês Carmo Luís et al.**
A comparative analysis of K, Ca, S and P accumulation in leaves of three cork oak forests of Portugal
- 1.18. **Marija Kristić, Miroslav Lisjak, Sanja Šestan, Tihana Teklić et al.**
Functional quality of wheatgrass grown from seed biofortified with selenium and zinc
- 1.19. **Jelena Lončar, Tomislav Kos, Ana Gašparović-Pinto, Slaven Zjalić**
The occurrence of aflatoxin B1 in maize (*Zea mays*, L.) in an experimental field in Osijek
- 1.20. **Željka Lončarić, Marko Palijan, Sandra Ečimović, Henner Hollert**
How microplastics modify the effects of agrochemicals – changes in reproduction success of two Collembola species
- 1.21. **Zdenko Lončarić, Hrvoje Hefer, Milena Andrišić, Ivana Zegnal, Daniel Rašić**
Soil fertility and agrochemical indicators in Republic of Croatia in 2022
- 1.22. **Maria Macháčová, József Kiss, Renata Bažok**
Practices on enhancing favourable habitat for natural enemies in potato protection – a review
- 1.23. **Ivana Rajnović, Branka Maričić, Nina Toth, Marija Pecina, Petra Borovec et al.**
Beneficial bacteria associated with chickpea: their diversity and the influence on yield
- 1.24. **Katarina Matan, Kristina Krklec, Mirna Švob, David Domínguez-Villar et al.**
Pedogenic carbonates in Calcocambisol: a case study from a location on the North Dalmatian plain
- 1.25. **Ines Mihaljević, Marija Viljevac Vuletić, Vesna Tomaš, Dominik Vuković et al.**
Screening for drought tolerance in five plum rootstocks based on physiological and biochemical parameters
- 1.26. **Mirna Mrkonjić Fuka, Dina Karaula, Irina Tanuwidjaja, Martina Grdiša**
The potential of essential oils in inhibiting the growth of pathogenic bacteria

- 1.27. **Marko Ožura, Nina Popović, Zrinka Mesić**
Effect of wildfire on the spread of invasive plant species in the southwestern area of Karlovac County
- 1.28. **Aleksandra Perčin, Marija Galić, Ivan Dugan, Igor Bogunović**
Peri-urban land use planning and their implication on soil contaminant concentrations
- 1.29. **Vesna Perić, Marijenka Tabaković, Vojka Babić, Milena Simić et al.**
Soybean seed yield in response to sowing date and inoculation in conventional and organic production systems
- 1.30. **Marko Petek, Magdalena Hokman, Sanja Fabek Uher, Tomislav Karažija**
Macroelements in French beans on the market in the city of Zagreb
- 1.31. **Robert Ato Newton, Valentina Pidlisnyuk, Sergiy Ust'ak et al.**
Multiyear Miscanthus biomass production at the marginal land: case of Chomutov, the Czech Republic
- 1.32. **Sanda Rašić, Nataša Uranjek, Rea Adamović, Edita Štefanić**
Flora of macrophytes of Drava oxbow lakes in the area of Virovitica-podravina county
- 1.33. **Márk Rékási, Zdenko Lončarić, Nikolett Uzinger, Orsolya Szécsy et al.**
Effectiveness of sewage sludge and sewage sludge based fertilizers on different soils
- 1.34. **Jasmina Rinkovec, Gordana Pehneć, Mirjana Čačković, Valentina Gluščić et al.**
Sulphur in air, soil and vegetation at the Molve Field
- 1.35. **Jasna Savić, Vladimir Aćin, Milan Miroslavljević, Srđan Šeremešić et al.**
Soybean increases grain Zn and protein of winter wheat grown in the three-crop rotation
- 1.36. **Maria Manuela Silva, Fernando C. Lidon, Diana Daccak, Cláudia Pessoa et al.**
A comparative analysis of Zn, Cu, Mn and Fe accumulation in leaves of three cork oak forests of Portugal
- 1.37. **Iva Hrelja, Igor Bogunović, Aleksandra Perčin, Ivana Šestak**
Assessment of soil organic matter in post-fire period using VNIR spectroscopy

- 1.38. **Marijenka Tabaković, Vesna Perić, Milan Brankov, Vesna Dragičević et al.**
Increasing the potential for improving morphological characteristics of soybean seeds (*Glycine max* L.) through an ecological approach
- 1.39. **Lenka Tomovičová, Luba Durišová, Samuel Kšiňan, Marek Kolenčík et al.**
The effect of zinc nanoparticles on the cherry plum germination
- 1.40. **Mirna Velki, Lucija Sara Kovačić, Željka Lončarić, Sandra Ečimović et al.**
Do microplastics affect the reproductive success of beneficial soil organisms?
- 1.41. **Marija Viljevac Vuletić, Ines Mihaljević, Vesna Tomaš, Zvonimir Zdunić et al.**
Physiological responses of apricot leaves to drought
- 1.42. **Clemens Wolsing, Toni Safner, Marko Maričević, Boris Lazarević**
Estimation of nitrogen concentration in winter wheat leaves using multispectral imaging
- 1.43. **Marko Zorica, Tihana Teklić, Marija Špoljarević, Magdalena Baričević et al.**
Influence of physiologically active substances on the mineral composition of cherry leaves

Session 7 :: Animal Science

HALL :: ELAFITI 3

Moderators :: Zlatko Janječić, Vladimir Margeta, Dubravko Škorput

- 08:30 **Michał Gesek, Daria Murawska, Adrianna Michniewicz**
Possibilities and challenges of substituting soybean meal with full-fat black soldier fly larva meal (*Hermetia illucens* L.) in broiler nutrition
- 08:45 **Alen Džidić, Daniel Stojšavljević, Vinko Batinić, Dragica Šalamon**
Milking cluster removal strategies for dairy cattle
- 08:55 **Dubravko Škorput, Minja Zorc, Marija Špehar, Zoran Luković**
Inbreeding depression and inbreeding load for litter size in Black Slavonian pig

- 09:05 **Dubravko Škorput, Maja Prevolnik Povše, Zoran Luković, Danijel Karolyi et al.**
The relationship between birth order and teat order of piglets in highly prolific sows: a preliminary study
- 09:15 **Katarina Marić, Dalida Galović, Danijela Samac, Jakov Jurčević et al.**
Precision pig farming
- 09:25 **Nataša Mikulec, Dario Domović, Fabijan Oštarić, Dijana Plavljančić et al.**
Determining the mineral composition of „Paški sir“ cheese using inductively coupled plasma mass spectrometry method
- 09:35 **Goran Mikec, Marijana Vrbancić Igrić, Marko Jelen**
Production results of Križevačka kukmica chicks fattening
- 09:45 **Mario Shihabi, Minja Zorc, Vlatka Čubrić-Čurik, Luboš Vostry et al.**
Convergent genomic signatures of adaptation in Livestock Guardian Dogs and Gray Wolves

Discussion

- 10:00 **Coffee Break**

Moderators :: Ante Kasap, Ivica Kos, Boris Lukić

- 10:30 **Daniel Falta, Francois Lategan, Tomáš Kopec, Radek Filipčík**
Artificial Intelligent (AI) technologies in livestock production systems
- 10:45 **Marija Špehar, Zdenko Ivkić, Drago Solić, Ante Kasap**
Estimation of genomic inbreeding (FROH) in Croatian Holstein cattle population
- 10:55 **Boris Lukić, Ino Čurik, Ivana Držaić, Vlatko Galić, Mario Shihabi et al.**
Genome-wide signatures of selection and gene ontology analysis of East Adriatic sheep
- 11:05 **Jelena Ramljak, Marija Špehar, Valentino Držaić, Gordan Šubara et al.**
Genomic inbreeding between flocks in Istrian sheep
- 11:15 **Ante Kasap, Bartol Smutni, Jelena Ramljak, Valentino Držaić, Boro Mioč et al.**
The impact of inbreeding on birth weight in the Pag Sheep breed

- 11:25 **Marina Ravlić, Ivan Vnučec, Ante Kasap, Ivan Širić, Dalibor Bedeković et al.**
Morphometric characteristics and carcass cuts of the Pag sheep
- 11:35 **Mateja Pečina, Nikolina Kelava Ugarković, Ivica Kos, Zvonimir Prpić et al.**
Genetic markers and fatty acids in sheep meat: exploring links to sensory properties
- 11:45 **Antun Kostelić**
Effects of climate change on sheep flock health
- 11:55 **Mateja Pečina, Ante Ivanković, Gordan Šubara, Nikolina Kelava Ugarković et al.**
Amino acid composition of meat from two local donkey breeds

Discussion

Lunch break

14:00 Session 7 :: Animal Science :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Nikolina Kelava Ugarković, Željka Klir Šalavardić, Zvonimir Prpić

- 7.1. **Zvonko Antunović, Željka Klir Šalavardić, Krunoslav Zmaić, Josip Novoselec**
Concentration of Fe, Zn and Cu in the blood of Alpine goats in the early stage of lactation
- 7.2. **Andreja Babić, Nataša Pintić Pukec, Ivan Vnučec, Miljenko Konjačić et al.**
ELISA milk pregnancy test as a tool for fertility management in sheep - pilot project on Croatian farms
- 7.3. **Darija Bendelja Ljoljić, Iva Dolencić Špehar, Ivica Kos, Ivan Vnučec et al.**
The use of bacteriocins of lactic acid bacteria in the prevention and treatment of mastitis

- 7.4. **Krešimir Bošnjak, Marina Vranić, Josip Leto, Hrvoje Kutnjak, Goran Perčulija**
The forage quality of indigenous semi-natural pasture as affected by nitrogen fertilization
- 7.5. **Krešimir Bošnjak, Marina Vranić, Ivana Čačić**
The effect of sward suppression and the red clover sowing rate on the success of grassland renovation in the sowing year
- 7.6. **Jozef Bujko, Juraj Candrák, Peter Strapák, Cyril Hrnčár, Radovan Kasarda**
Analysis of birth weight factors in calves from selected Slovak Spotted Cattle farms
- 7.7. **Matija Domaćinović, Dragan Solić, Ivana Prakatur, Mislav Đidara et al.**
Distribution of particle structure in corn silage on dairy farms in the Republic of Croatia
- 7.8. **Ana Džaja, Valentino Držaić, Ivan Širić, Ante Kasap, Boro Mioč**
Wool disposal practices of sheep breeders in Croatia
- 7.9. **Mislav Đidara, Marcela Šperanda, Ivana Prakatur, Martina Pavlič, Saša Lončar**
The emerging concern of microplastics and nanoplastics in animal health
- 7.10. **Milana Đermanović, Dalida Galović, Ivana Prakatur, Vladimir Margeta**
Production and slaughter indicators of fattening black Slavonian pigs kept outdoors and on deep litter
- 7.11. **Vesna Gantner, Zvonimir Steiner, Ranko Gantner, Dragan Solić et al.**
The prevalence of subclinical and clinical mastitis and its effect on milk yield of dairy cows bred in various regions
- 7.12. **Ana Kaić, Matija Stamičar, Dubravko Škorput, Dalibor Bedeković et al.**
Effect of dietary supplementation of the industrial hemp leaves on physical properties of broiler chicken meat
- 7.13. **Nikolina Kelava Ugarković, Ante Ivanković, Zvonimir Prpić, Miljenko Konjačić**
Measurement of the cattle rib-eye area by different methods

- 7.14. **Željka Klir Šalavardić, Ena Šmital, Josip Novoselec, Zvonko Antunović**
Morphometric characteristics of growing lambs as affected by litter size
- 7.15. **Doris Gašpar, Kristina Gvozdanović, Dalida Galović, Danijela Samac et al.**
Behavior of pigs in different farming systems
- 7.16. **Daria Murawska, Michał Gesek, Dorota Witkowska**
The effects of different dietary protein inclusion levels on capons growth performance
- 7.17. **Ivana Prakatur, Danijela Samac, Ana Domaćinović, Ljubica Pastuović et al.**
Cinnamon - a possible additive in animal feeding
- 7.18. **Josip Vrdoljak, Zvonimir Prpić, Antun Kostelić, Ivan Vnučec et al.**
Relationship between some body measurements and dairy traits of Alpine goats
- 7.19. **Ivan Vnučec, Anđela Klapan, Dalibor Bedeković, Darija Bendelja Ljoljić et al.**
Valorisation of secondary animal products in the sense of sustainable meat production
- 7.20. **Dorota Witkowska, Aneta Ponieważ, Joanna Żebrowska, Daria Murawska**
Hygienic strategies of farm animal welfare development
- 7.21. **Goran Lipavić, Nikola Raguž, Ras Lužaić, Žarko Radišić, Boris Lukić**
Factors affecting intramuscular fat content in pigmeat

Session 11 :: Precision Farming

HALL :: ELAFITI 4

Moderators :: Ana Matin, Kurt A. Rosentrater, Hrvoje Kutnjak

08:30

Kurt A. Rosentrater

Developing technologies to lower environmental impacts of grain storage and processing

- 08:45 **Ana Matin, Ivan Brandić, Alan Antonović, Mateja Grubor et al.**
Optimizing the energy efficiency of the corn grain drying process based on temperature, psychrometric and energetic parameters
- 08:55 **Ivan Brandić, Lato Pezo, Tajana Krička, Neven Voća, Ana Matin**
Application of the artificial neural network model in the modeling of the drying process of corn
- 09:05 **Anamarija Banaj, Mihael Ribičić, Željka Banaj et al.**
Application of twin row technology in sunflower sowing
- 09:15 **Anamarija Banaj, Bojan Stipešević, Dražen Horvat et al.**
Application of the MaterMacc Twin Row-2 sowing machine in soybean sowing
- 09:25 **Emilija Friganović, Tajana Krička, Ana Matin**
Precision urban farming
- 09:35 **Hrvoje Kutnjak, Luka Štefančić, Snježana Bolarić, Josip Leto**
Inter- and intra-annual specificities of alfalfa and clover-grass mixtures yield prediction using Sentinel-2 satellite imagery
- 09:45 **Mateja Grubor, Ana Matin, Alan Antonović, Božidar Matin et al.**
Agriculture 4.0 in the development of Smart agriculture

Discussion

- 10:00 **Coffee Break**

Moderators :: Vanja Jurišić, Nikola Bilandžija, Mateja Grubor

- 10:30 **Božidar Matin, Nives Jovičić, Tajana Krička, Vanja Jurišić et al.**
Comparison of the physico-chemical properties of liquefied oak (*Quercus robur* L.) and walnut (*Juglans regia* L.) shells for use in the production of biocomposites
- 10:40 **Alen Đurović, Božidar Matin, Ivan Brandić, Ivana Tomić et al.**
Influence of soybean (*Glycine max*) and hemp (*Cannabis sativa*) stalks biomass to glycerol solvent ratio on liquefied properties
- 10:50 **Anamarija Gudelj – Velaga, Nikola Bilandžija, Josip Leto et al.**
Energy properties of the Virginia mallow (*Sida hermaphrodita*) residue from enzymatic fiber isolation

- 11:00 **Karlo Špelić, Ivan Brandić, Ana Matin, Ivana Tomić, Vanja Jurišić**
Effect of anaerobic fermentation on the lignin component in silage and haylage production from miscanthus
- 11:10 **Krešimir Čopec, Nikola Golak, Dubravko Filipović et al.**
Application of synthesis gas obtained by gasification of wood biomass as fuel for four-stroke Otto engines
- 11:20 **Nikola Bilandžija, Vinko Mihalina, Dominik Vuković et al.**
Energy potential of vineyards and orchards biomass after the plantation removal

Discussion

12:00 Session 11 :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Ivan Brandić, Karlo Špelić, Anamarija Gudelj – Velaga

- 11.1. **Vanja Jurišić, Mario Panjičko, Gregor Drago Zupančić et al.**
Biogas production from *Arundo donax* in a continuous digestion system
- 11.2. **Nives Jovičić, Alan Antonović, Božidar Matin, Tajana Krička, Ana Matin**
Opportunities for reshaping European agriculture: Green technologies and the EU Green Deal
- 11.3. **Vanja Jurišić, Čorba Marija, Mario Panjičko et al.**
Biodegradability of *Arundo donax* during a continuous mesophilic anaerobic digestion
- 11.4. **Đurđica Kovačić, Matej Krajcar, Luka Kobak, Tomislav Jurić et al.**
Basic maintenance and service of the equipment on two biogas plants
- 11.5. **Ivana Tomić, Ivan Brandić, Vanja Jurišić, Karlo Špelić et al.**
Disposal of olive pomace by drying

- 11.6. **Sabina Poudel, Valeria Paola Borghini, Monika Zovko**
Exploring the potential of Near-Infrared Spectroscopy in evaluating soil properties and detecting microplastics
- 11.7. **Ante Galić, Stjepan Pliestić, David Vučina**
Effect of laser treatments on wheat germination
Domagoj Zimmer, Luka Šumanovac, Mladen Jurišić, Anamarija Banaj et al.
- 11.8. Impact of specified innovative techniques and technologies in agriculture

Session 9 :: Plant Protection

HALL :: ASIMON

Moderators :: Darija Lemić, Tomislav Kos, Edyta Đermić

- 11:00 **Edyta Đermić, Katarina Martinko, Siniša Ivanković et al.**
Decontamination of *Escherichia coli* from fresh tomato fruits by phenylboronic acid
- 11:15 **Marko Vinceković, Slaven Jurić, Laura Hazlar, Kristina Vlahoviček Kahlina**
Preparation and characterization of copper alginate microparticles as a new plant protection agent
- 11:25 **Magdalena Baričević, Karolina Vrandečić, Ana Gašparović Pinto, Tomislav Kos**
Occurrence of drupe rot of olive (*Camarosporium dalmaticum* Thüm) under conditions of reduced copper application in olive groves of Zadar County
- 11:35 **József Fail**
Onion thrips: a pest of economic importance and a model insect for research
- 11:45 **Sandra Skendžić, Hrvoje Novak, Monika Zovko et al.**
Classification of damage by cereal leaf beetles on winter wheat using machine learning, spectral reflectance, and vegetation indices

Discussion

12:00

Session 9 :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Ivana Pajač Živković, Marija Ravlić, Joško Kaliterna

- 9.1. **Marko Vinceković, Slaven Jurić, Kristina Vlahoviček Kahlina et al.**
Simultaneous encapsulation of silver and zinc ions in biopolymer microparticles
- 9.2. **Katarina Zečević, Ivana Stanković, Branka Krstić**
Identification and subgrouping of cucumber mosaic virus isolate infecting New Guinea impatiens (*Impatiens hawkeri*) in Serbia
- 9.3. **Biljana Lolić, Tatjana Milaković, Stefani Tepić, Sonja Umićević, Marina Antić**
Pseudomonas syringae pv. *persicae*, the causal agent of bacterial dieback of peach in the Republic of Srpska
- 9.4. **Elena Petrović, Karolina Vrandečić, Dario Ivić, Jasenka Ćosić et al.**
Phytopathogenic fungi on olive tree identified for the first time in Croatia
- 9.5. **Katarina Martinko, Luka Keran, Igor Pasković, Joško Kaliterna**
Antifungal effect of tea tree, rosemary and thyme essential oil on development of phytopathogenic fungus *Alternaria alternata*
- 9.6. **Milica Lučev, Ana Nikolić, Iva Savić, Ana Obradović, Slavica Stanković**
New toxigenic species of the genus *Aspergillus* on maize kernels
- 9.7. **Marko Vinceković, Katarina Martinko, Ivna Podrug, Joško Kaliterna**
Influence of cannabidiol (CBD) biopolymer microparticles on *Botrytis cinerea*
- 9.8. **Ana Obradović, Jelena Stepanović, Vesna Krnjaja, Milica Lučev, Slavica Stanković**
Trichothecene chemotypes of *Fusarium graminearum* species complex in Serbia
- 9.9. **Tatyana Stefanovska, Andrzej Skwierc, Valentina Pidlisnyuk et al.**
Plant parasitic nematodes of *Miscanthus × giganteus* and their effect on the crop's production

- 9.10. **Martina Pajač Beus, Darija Lemić, Aleksandar Mešić, Ivana Pajač Živković**
The brown marmorated stink bug (Hemiptera: Pentatomidae) – a major threat to European crop production
- 9.11. **Vesna Tomaš, Ines Mihaljević, Marija Viljevac-Vuletić, Dominik Vuković**
Efficacy of different insecticides treatments in controlling brown marmorated stink bug (*Halyomorpha halys*)
- 9.12. **Ankica Sarajlić, Stanislav Trdan, Ivana Majić, Marija Ravlić et al.**
Effects of different management regimes on the population of the American grapevine leafhopper (*Scaphoideus titanus* Ball)
- 9.13. **Joel Fausto Eculica, Alain de la Rosa Andino et al.**
Monitoring and identification of fruit-fly species in mango trees in Cuanza Sul, Angola
- 9.14. **Andrej Jurković, Darija Lemić, Helena Virić Gašparić**
Influence of biostimulants on physiological traits and induced plant defense responses in tomato production
- 9.15. **Marija Ravlić, Renata Baličević, Ankica Sarajlić et al.**
Allelopathic potential of ruderal plant species on tomato and lettuce
- 9.16. **Beata Jop, Katarzyna Marczevska-Kolasa, Jan Bocianowski et al.**
The influence of temperature on the germination of herbicide-sensitive and herbicide-resistant common windgrass

Session 10 :: Food, Feed and Quality

HALL :: ASIMON

Moderators :: Iva Dolencić Špehar, Nevena Opačić

- 14:00 **Marija Duvnjak, Vida Vertuš, Kristina Kljak et al.**
Fermentation characteristics of alfalfa silage during one week of aeration
- 14:15 **Mia Dujmović, Mia Kurek, Zdenko Mlinar et al.**
Preservation of bioactive compounds of fresh nettle leaves by modified atmosphere
- 14:25 **Jana Šic Žlabur, Mia Dujmović, Sanja Radman et al.**
Valorization of bioactive compounds of classic and quick-frozen nettle leaves through a combination of different pretreatments

- 14:35 **Tea Agić, Dorotea Piškor, Marina Posavec et al.**
Validation of meat products without added nitrites, nitrates or phosphates
- 14:45 **Monica Darrer, Danijela Stručić, Kristina Kljak et al.**
Potential residues in sheep and goat milk in Croatia
- 14:55 **Samir Kalit, Iva Dolencić Špehar, Darija Bendelja Ljoljić et al.**
The influence of milk quality and technological production procedures on the cheese yield
- 15:05 **Dora Zurak, Goran Kiš, Dalibor Bedeković, Zlatko Janječić et al.**
Yolk carotenoid content and deposition efficiency vary depending on the mineral form and vitamin A levels in the laying hen diet
- 15:15 **Gordana Jurak, Jasna Bošnjir**
The role of the national reference laboratory (NRL) in the coordination of official laboratories for pesticide residue analysis

Discussion

- 15:30 **Coffee Break**

16:00 Session 10 :: Poster Session

HALL :: ELAFITI 1

Questions and discussion on posters

Moderators :: Kristina Kljak, Ivica Kos

- 10.1. **Tatiana Bojňanská, Dana Urminská, Anna Kolesárová et al.**
Application of medicinal mushroom extracts in bread and their effect on bread quality
- 10.2. **Daniela Horvat, Gordana Šimić, Marija Kovačević Babić et al.**
Cereals whole grain as important source of biologically active ferulic acid
- 10.3. **Dana Urminská, Tatiana Bojňanská, Milan Chňapek et al.**
Triticum dicoccum as a source of nutritional valuable proteins and essential microelements in human nutrition

- 10.4. **Valentina Obradović, Maja Bakač, Svjetlana Škrabal et al.**
Influence of pectin type and sugar level on sensory properties of blueberry jam
- 10.5. **Jasmina Tahmaz**
Possible applications of encapsulation in fruit and vegetable technology – a review
- 10.6. **Roko Marović, Sven Karlović, Filip Dujmić, Mladen Brnčić et al.**
Effect of high hydrostatic pressure pre-treatment on the properties of vacuum-dried avocado peel
- 10.7. **Mirela Kopjar, Dražen Raucher, Marry Ann Lila, Josip Šimunović**
Exploring the antiproliferative potential of select berry juices against late and early-stage colon cancer cells
- 10.8. **Ante Lončarić, Ana-Marija Gotal Skoko, Tihomir Kovač et al.**
Impact of chemical parameters on patulin contamination in traditional and commercial apple cultivars
- 10.9. **Dubravka Škevin, Petra Brezjan, Zoran Herceg, Mia Ivanov et al.**
Can pulsed electric field pretreatment improve the phenolic profile of virgin olive oil from Croatian varieties?
- 10.10. **Tamara Stamenić, Maja Petričević, Bridžita Đorđević et al.**
Exploring the role of inulin as a nutraceutical for enhancing nutritional and health benefits - a review
- 10.11. **Jaime Fernandes, Maria M. Silva, Maria M. Simões et al.**
Evaluation of the elementary composition of plants used in infusions, by X-Ray Fluorescence Analysis (XRF)
- 10.12. **Adela Krivohlavek, Ana Tot, Magdalena Gavran, Martina Ivešić et al.**
Presence of glyphosate, aminomethylphosphonic acid and glufosinate in fruits and vegetables on Croatian market
- 10.13. **Dora Zurak, Goran Kiš, Dalibor Bedeković, Zlatko Janječić et al.**
Egg quality parameters and yolk oxidative stability in laying hens fed diets differing in mineral form and vitamin A supplementation levels
- 10.14. **Darija Bendelja Ljoljić, Arijana Klindić, Ivan Vnućec, Ivica Kos et al.**
The impact of cream ripening on butter characteristics
- 10.15. **Ksenija Čobanović, Saša Krstović, Miloš Petrović, Tamara Đurić et al.**
Rolled cheese with the addition of insects as an alternative source of protein

- 10.16. **Draženko Budimir**
Nutritive value of albumin cheese made from whey after the production of trappist cheese
- 10.17. **Milna Tudor Kalit, Ante Rako, Iva Vaskić, Iva Dolenčić Špehar et al.**
Quality of cooked cheese with the addition of spices
- 10.18. **Iva Dolenčić Špehar, Marija Crljenjak, Darija Bendelja Ljoljić et al.**
Use of whey protein in athletes' nutrition
- 10.19. **Stefani Levak, Luna Maslov Bandić, Katarina Sopko Stracenski et al.**
Total polyphenol and flavonoid content and antioxidant properties of semi-hard goat cheese ripened in oil
- 10.20. **Ivica Kos, Jelka Pleadin, Ivan Vnučec, Darija Bendelja Ljoljić et al.**
Effect of monosodium glutamate addition on physical and sensory properties of cooked sausages
- 10.21. **Maja Petričević, Tamara Stamenić, Tanja Keškić, Nikola Stanišić et al.**
Assessment of technological characteristics in chicken sausages utilizing inulin for fat reduction

20:00

GALA DINNER



11-16 February 2024, Dubrovnik, Croatia

