

SECTION: PLANT PRODUCTION

MS Teams

Start from: 9:30

Chairman: Prof. Ing. Radovan Pokorný, Ph.D.

9:30–10:30

1. Ing. Petra Dížková – Modelling the onset of phenological phases of spring barley (*Hordeum vulgare* L.)
2. Ing. Ivana Jovanović – Seed vigour effected by total polyphenols content
3. Ing. et Ing. Lukáš Vašík – The effect of different technical details of drip irrigation on fruit yield and annual increments of "Gala" apple
4. Ing. Lucie Fojtíková – Variability of oil content in samples of milk thistle [*Silibum marianum* (L.) Gaertner] from different variants of herbicide treatment

10:30–11:30

5. Mgr. Ina Kyselova – A variety of transpiration in the young spruce stands with different thinning management
6. Mgr. Marian Švik – Estimation of winter wheat yield using machine learning from airborne hyperspectral data
7. Ing. Jakub Neupauer – Influence of vermicompost on growth parameters and content of chlorophylls in maize during vegetation
8. Ing. Igor Horniaček – Use of unmanned aerial remote sensing for in-season diagnosis of winter wheat nitrogen status

11:30–12:30

9. Ing. Jakub Bohuslav – Comparing of observed and simulated field crop production in HERMES2Go model at Hněvčeves locality
10. Ing. Ján Šimor – Effect of elevated CO₂ concentration and nitrogen nutrition on mais response to short-term high temperature and drought stress
11. Ing. Žaneta Pražanová – A comparison of the efficiency of pheromone lures on the *Cydia pomonella* (codling moth)
12. Ing. et Ing. Jiří Mezera – Estimation of winter wheat nitrogen status and prediction of crop yield by satellite and proximal sensing

12:30–13:30

13. Ing. Emmanuel Opoku – Interactive effects of adaptation technology, based on no-till sowing into the mulch of cover crop residues, and nitrogen nutrition on photosynthetic performance of maize under drought stress
14. Ing. Daniel Růžička – The effect of biochar co-application with soil prebiotic on biomass production and soil basal respiration
15. Ing. Marcela Hlaváčková – Yield formation parameters of winter wheat under two CO₂ levels in water sufficient and depleted environment
16. Ing. Michal Řiháček – Evaluation of nutritional potential of selected sorghum varieties in relation to different types of soil localities

SECTION: ANIMAL PRODUCTION

MS Teams

Start from: 9:30

Chairman: Prof. Ing. Gustav Chládek, CSc.

9:30–10:30

1. Ing. Kristýna Kocianová – Evaluation of reproductive parameters at a farm specializing in breeding of Czech Fleckvieh dairy cows
2. Ing. Vojtěch Pešan – Determination of optimal insemination time in sheep by assessing cervical mucus arborization
3. Mgr. Jan Prouza – Condition of honeybee colonies overwintered with winter stores enriched by extracts of polypore mycelia
4. Ing. Jakub Novotný – The influence of different feed particle size in broiler diets on the performance parameters and digestive viscosity

10:30–11:30

5. Ing. Alžběta Matusková – The effect of breed on body indices in draft horses in Czech Republic
6. Ing. Lucie Langová – Determination of the effectiveness of disinfectants containing organic acids for bovine footbaths
7. Ing. Petra Němcová – Methods for assessing the health of the limbs and their relationship to the duration of treatment for footrot: a pilot study
8. Ing. Lenka Zapletalová – The effect of housing technology on the milk performance of Holstein dairy cows in selected breeding

11:30–12:45

9. Ing. Markéta Popelková – Evaluation of Holstein cows originated from embryo transfer
10. Ing. Dana Zálešáková – Blood biochemical parameters in the evaluation of chicken nutrition during the starter feed period
11. Ing. Lucie Horáková – The influence of organic and inorganic selenium sources on the metabolism of broiler chickens
12. Ing. Martina Pešánová Tesařová – Effect of storage and preincubation on hatching egg quality and hatchability in meat type chicken
13. Ing. David Jeník – The effect of stage and number of lactations on the incidence of milking success when using Automatic Milking Systems

SECTION: FISHERIES AND HYDROBIOLOGY, WILDLIFE RESEARCH

MS Teams

Start from: 9:30

Chairman: Assoc. Prof. Ing. Radovan Kopp, Ph.D.

9:30–10:30

1. Ing. David Kopr – Contribution to the faunistic research of beetles (Insecta: Coleoptera) in Natural Monument Růžový kopec near Mikulov
2. Ing. Filip Zezula – Use of peas in fish nutrition
3. Ing. Gabriela Skopalová – Importance of cereals for population dynamics of common voles (*Microtus arvalis*) – a case study from Moravia (Czech Republic)
4. Ing. Lukáš Pfeifer – Rotifers and microcrustaceans communities in natural and restored peatlands

10:30–11:45

5. Karolína Sodomová – Influence of different forage mixtures treated selenium and zinc on pollinators
6. Ing. Petra Melezínková – Toxicity tests on *Daphnia magna*
7. Mgr. Aneta Hollerová – Is oral application of plastic particles able to provoke the oxidative stress and alter expression of an immunity related genes in rainbow trout?
8. MVDr. Denisa Medková – Effects of pesticides on catfish (*Silurus glanis*) embryos
9. Mgr. Radek Machát – Selected biochemical parameters of two common carp (*Cyprinus carpio*) breeds infected with koi herpesvirus

SECTION: AGROECOLOGY AND RURAL DEVELOPMENT

MS Teams

Start from: 9:30

Chairman: Prof. Dr. Ing. Milada Šťastná

9:30–10:30

1. Ing. Markéta Šourková – Determining the phytotoxicity of rubber granulate from waste tires
2. Ing. Richard Langer – Analysis of awareness of the implementation of agricultural production in Czech Republic
3. Ing. Jan Oulehla – Historical and contemporary endangered wetland species of the southeastern part of the Bohemian-Moravian Highlands
4. Ing. Juliana Arbelaez Gaviria – Integrated national-scale assessment of climate change impacts on agriculture: the case of the Czech Republic

10:30–11:45

5. Ing. Vladimíra Tarbajová – Optimization of ATS system for pollutants removing
6. Ing. Vojtěch Polách – Variation of glomalin content in the Czech soils and the relationships to the chemical soil characteristics and climatic regions
7. Ing. Tomáš Ghisi – Analysis of small forest catchments evapotranspiration determined by precipitation/runoff measurements, remote sensing model DisALEXI and water balance model SoilClim
8. Ing. Yves Theoneste Murindangabo, Msc – Biomass production and high heating value aspects of selected energy grasses under different types of fertilization
9. Ing. Luboš Sedlák – Hydropsychical parameters of alluvial soil in the floodplain forest at Dyje river

SECTION: FOOD TECHNOLOGY

MS Teams

Start from: 9:30

Chairman: Assoc. Prof. Ing. Šárka Nedomová, Ph.D.

9:30–10:30

1. Ing. Jan Slováček – Possibilities of use and quality parameters of beaver canned meat (*Castor fiber* L.)
2. Ing. Michaela Némethová – Quality of malt made from current and historical malting barley varieties
3. Ing. Alan Dymchenko – Use of leftover bread for beer production
4. Ing. Nikol Šňupíková – Quality of beer made from bakery leftovers

10:30–11:45

5. Ing. Jakub Martinek – Reduction of weight loss after defrosting of meat using a gelatin-based coating
6. Ing. Kristýna Ondroušková – Encapsulation of fortifying ingredients in colloidal emulsions of lecithin
7. Mgr. Martina Pečová – Quality of superworm (*Zophobas morio*) fats determined by Raman spectroscopy
8. Ing. Josef Bauer – Development of 3D printing in food processing
9. Ing. Aneta Prokopová – Effects of a preparation based on a functional collagen polymer on the skin in the periorbital area

SECTION: PLANT BIOLOGY

MS Teams

Start from: 9:30

Chairman: Assoc. Prof. Ing. Pavel Hanáček, Ph.D.

9:30–10:30

1. Ing. Veronika Berková – Characterization of the potential biological control *Acremonium alternatum* using omics approaches
2. Ing. Miroslav Berka – Method for simultaneous detection of *Phytophthora infestans* proteins and DNA in *Solanum tuberosum* samples
3. Mgr. Markéta Michutová – Identification of powdery mildew (Erysiphales) species on ornamental perennial plants (*Asteraceae*) in the gardens of Mendel University in Brno
4. Ing. Natálie Pernicová – Short-term application of elevated temperature and drought influences the isotopic composition of winter wheat grains

10:30–11:30

5. Ing. Nicole Frantová – Transcript levels of *VRN1*, *PPD-D1*, *PPD-B1* and *PPD-A1* genes during different developmental stages of winter wheat
6. Mgr. Hana Montagová – Atmospheric CO₂ concentration, light intensity, and nitrogen nutrition affect spring barley response to drought and heat stress
7. Ing. Patrik Schreiber – Methodology of phenotypes selection of hemp (*Cannabis sativa* L.) for secondary metabolite production
8. Ing. Nikolas Balog – Effects of intermittent-direct-electric-current (IDC) on growth and content on photosynthetic pigments in hemp (*Cannabis sativa* L.)

11:30–12:15

9. Ing. Attila Kucsera – Auxin or Sugar? Which has higher impact on bud outgrowth regulation?
10. Mgr. Evelína Gahurová – The role of expansins in the control of cell wall properties and root apical meristem development in *Arabidopsis*
11. Katrina Leslie Nicolas – Natural genetic variability in multistep phosphorelay as a tool to enhance drought tolerance of plants

SECTION: TECHNIQUES AND TECHNOLOGY

MS Teams

Start from: 9:30

Chairman: Assoc. Prof. Ing. Vojtěch Kumbár, Ph.D.

9:30–10:30

1. Ing. Daniel Trost – Mathematical models for temperature-dependent viscosity of FAME and diesel blends
2. Ing. Radim Šmak – Stability of intermetallic phases in the heat affected zone depending on shielding gases
3. Ing. Jaroslav Ložrt – Alternative mechanical pre-treatment methods of hot-dip galvanising surface to increase of the organic coatings adhesion
4. Ing. Aneta Šinková (presented by Patrik Zatloukal) – The evaluation of selected mechanical and physical properties of pelletized compost

10:30–11:30

5. Ing. Robert Rouš – Hyperspectral imaging LED and incandescent light source comparison for food quality inspection
6. Ing. Jakub Pernica – Comparison of stress action of real specimens and computer model during tensile testing
7. Ing. Bc. Jana Dvořáková – Comparison of fatigue behaviour of AlSi10Mg CT samples prepared by casting and by additive technologies
8. Ing. Robert Šarocký – Evaluation of the quality of material produced by additive production using acoustic emission

SECTION: APPLIED CHEMISTRY AND BIOCHEMISTRY, ANIMAL BIOLOGY

MS Teams

Start from: 9:30

Chairman: Assoc. Prof. RNDr. Ondřej Zítka, Ph.D.

9:30–10:30

1. MVDr. Viola Zentrichová – Copper and zinc in dogs: impact of sex, age, and diet on serum levels
2. Ing. Zdeněk Kratochvíl – Exploring the pH-triggerable structure of siRNA-carrying liposomal nanoparticles as tools for treatment of hepatitis B
3. Ing. Katarína Soušková – Stallion semen cooling using different types of extenders
4. Mgr. Paulína Takácsová – Cross-linked-Pd⁰ polyethyleneimine catalyst for bioorthogonal chemistry

10:30–11:45

5. Ing. et Bc. Milada Vodova – Molecularly imprinted polymers as a recognition element for the determination of disease markers
6. Ing. Nikola Schlosserová – Identification of volatile compounds produced by *Laetiporus sulphureus* using OSMAC cultivation strategy
7. Ing. Michala Steinerová – Associations of *SOST* and *TNFSF11* genes polymorphisms with bone parameters in broilers
8. Ing. Kristína Pániková – Pesticides and long-term denitrification conditions
9. Tereza Olekšáková – DNA barcoding and metabarcoding in forensic entomology: casuistic and future challenges