



IPSP 2024



14th Conference of the IOBC/WPRS Working Group
on the Integrated Protection of Stored Products

16th to 20th September 2024
NOVI SAD, SERBIA

Conference program



Venue

Hotel Sheraton, Novi Sad, Serbia



COMMITTEES

Scientific committee

Sonja Gvozdenc, Institute of Field and Vegetable Crops (IFVCNS), Serbia

Jordi Riudavets, IRTA, Cabrils, Barcelona, Spain

Sara Savoldelli, University of Milan, Italy

Benjamin Fürstenau, Julius Kühn-Institut, Berlin, Germany

Anita Liška, Faculty of Agrotechnical Sciences, Osijek, Croatia

Filip Vukajlović, Faculty of Science, University of Kragujevac, Serbia

Cornel Adler, Julius Kühn-Institut, Berlin, Germany

Stanislav Trdan, Biotechnical Faculty, University of Ljubljana, Slovenia

Vaclav Stejskal, Crop Research Institute, Prague, Czech Republic

Christos Athanassiou, University of Thessaly, Greece

Nuria Agustí, IRTA, Cabrils, Barcelona, Spain

Maria Otilia Carvalho, University of Lisbon, Portugal

Goran Jokić, Institute of Pesticides and Environmental Protection, Serbia

Organizing committee

IOBC Coordination

Marc Bardin (IOBC liaison officer)

Jordi Riudavets (IOBC group convenor)

Local organization (IFVCNS, Serbia)

Sonja Gvozdenc

Željko Milovac

Filip Franeta

Ana Marjanović Jeromela

Jelena Ovuka

Vladimir Miklič

Sandra Cvejić

Aleksandra Ilić

Brankica Babec

Miloš Krstić

Nemanja Ćuk

Nada Grahovac

Milica Škorić





MONDAY 16th September 2024

10:00 - 16:00 **REGISTRATION** (during the entire Conference)

12:00 - 13:00 **OPENING CEREMONY**

Marc Bardin, IOBC liaison

Jordi Riudavets, IOBC group convenor

Mladen Petreš, vice secretary of the Provincial Secretariat for Agriculture

Marijana Dukić Mijatović, Chairman of the Board of Directors of IFVCNS

Sonja Gvozdenac, Local organizing committee

13:00 - 14:00 **WELCOME DRINK**

WORKING SESSION 1: BIOLOGY, ECOLOGY, BIODIVERSITY AND BEHAVIOUR OF STORED PRODUCT PESTS (PART 1)

Moderators: Benjamin Fürstenau and Mirko Đorđević

14:00 - 14:30

PLENARY LECTURE

Goran Jokić. **MANAGEMENT OF HARMFUL RODENTS: CAN WE DO MORE?**

14:30 - 14:45

Nikola Laćarac, Miloš Petrović, Aleksandra Popović, Marija Ristić, Marko Krstović, Saša Vukadinović. **ASSESSING TRIBOLIUM CONFUSUM INFESTATION IN ANIMAL FEED CONTAINING EDIBLE INSECT MEAL.**

14:45 - 15:00

Sonja Gvozdenac, Snežana Tanasković, Jelena Ovuka, Milica Škorić, Dejan Prvulović, Miloš Krstić, Milivoj Radojčin, Ivan Pavkov. **SCREENING OF INTERSPECIFIC AND VARIETAL DIFFERENCES IN SMALL GRAINS SUITABILITY FOR SITOPHILUS ORYZAE (L.) DEVELOPMENT.**

15:00

DISCUSSION

17:30

Guided city tour (organized transportation in front of hotel Sheraton)



TUESDAY 17th September 2024

WORKING SESSION 1: BIOLOGY, ECOLOGY, BIODIVERSITY AND BEHAVIOUR OF STORED PRODUCT PESTS (PART 2)

Moderators: Benjamin Fürstenau and Mirko Đorđević

- 10:00 – 10:15 Julia Parsons, Marta S. Lopes, Jordi Riudavets. **PEST RESISTANCE, NATURAL ENEMIES EFFICACY, AND MYCOTOXINS PRODUCTION BY ASPERGILLUS FLAVUS IN TWO MAIZE VARIETIES.**
- 10:15 – 10:30 Nuria Agustí, Cristina Castañé, Jordi Riudavets. **DETECTION OF ARTHROPODS IN STORED GRAIN: LATEST ADVANCES AND FUTURE PERSPECTIVES.**
- 10:30 – 10:45 Jennifer Abshire, Dante Castaldi, Jenna Mooreland, Matthew Hetherington, Samantha Gillette, Paraskevi Agrafioti, Michael Domingue, Evagelia Lampiri, Christos Athanassiou, Alison Gerken, William R. Morrison III. **EVALUATING PLUME REACH OF TRAPS FOR QUARANTINE AND NON-QUARANTINE STORED PRODUCT BEETLES.**
- 10:45 – 11:00 George N. Mbata, James. K. Danso. **PREHARVEST AND POSTHARVEST LOSSES IN PEANUTS AS IMPACTED BY INSECT INFESTATION ALONG THE SUPPLY CHAIN IN GEORGIA STATE, USA.**
- 11:00 – 11:15 **DISCUSSION**
- 11:15 – 11:45 **POSTER SESSION AND COFFEE BREAK**

WORKING SESSION 2: BIOLOGICAL CONTROL AND NATURAL PRODUCTS IN STORED PRODUCT PROTECTION

Moderators: Anita Liška and Filip Vukajlović

- 11:45 – 12:00 Pablo Urbaneja-Bernat, Jordi Riudavets. **CAN ARTIFICIAL DIETS ENHANCE THE BIOLOGICAL CONTROL OF FIVE PARASITOID SPECIES OF STORED PRODUCT PESTS?**
- 12:00 – 12:15 Benjamin Fürstenau, Sarah Awater-Salendo. **ROLE OF MONOMETHYL-BRANCHED ALKANES IN HOST SEARCH OF A STORED PRODUCT BEETLE PARASITOID AND POSSIBLE EFFECTS OF HOST DIETARY SHIFTS.**

12:15 – 12:30

Salvatore Guarino, Pietro Ranno, Maurizio Priola, Franco Bambino, Ezio Peri. **EFFECTIVENESS OF PYRETHRUM AEROSOL FOR MANAGING TRIBOLIUM CASTANEUM (COLEOPTERA: TENEBRIONIDAE) IN FOOD STORAGE FACILITIES.**

12:30 – 12:45

Anita Liška, Ivan Paponja, Vlatka Rozman. **INSECTICIDAL EVALUATION OF ENHANCED DIATOMACEOUS EARTH FORMULATION AGAINST STORED PRODUCT INSECTS ON CROATIAN MAIZE HYBRIDS.**

12:45 – 13:00

Miloš Pavlović, Andrijana Stamenković, Nikola Đorđević, Mila Grahovac, Snežana Đorđević. **EFFECTS OF BIOFUNGICIDE SKLADIX BASED ON BACILLUS SUBTILIS IN THE CONTROL OF APPLE STORAGE PATHOGENS IN VIVO.**

13:00 – 13:15

Snežana Tanasković, Vesna Đurović, Dejan Prvulović, Milica Škorić, Radenka Kolarov, Sonja Gvozdenac. **ARE ALIEN PLANTS A POOL FOR NEW ECO-FRIENDLY “WEAPONS” AGAINST LESSER GRAIN BORER (RHYZOPERTHA DOMINICA)?**

13:15 – 13:30

Samuel Adelani Babarinde, Opeyemi Toluwase Akintoye. **EXPLORING VARIETAL RESISTANCE AND OCIMUM GRATISSIMUM ESSENTIAL OIL FOR GROUNDNUT PROTECTION AGAINST KHAPRA BEETLE, TROGODERMA GRANARIUM.**

13:30 – 13:45

Radenka Kolarov, Dejan Prvulović, Sonja Gvozdenac, Milica Škorić, Jelena Ovuka. **EXPLORING AILANTHUS ALTISSIMA LEAF EXTRACTS: IMPLICATIONS FOR SUSTAINABLE STORED PRODUCT PEST MANAGEMENT AND WHEAT GERMINATION.**

13:45 – 14:00

DISCUSSION

14:00 – 15:00

LUNCH BREAK (provided by the organisers)

15:00 – 16:00

WORKSHOP

“INTERACTIVE WORKSHOP ON STORED GRAIN PROTECTION: CHALLENGES, INNOVATIONS, AND INDUSTRY OUTLOOK BY novIGRain RESEARCH PROJECT”

16:30

TECHNICAL TOUR TO IFVCNS SEED PROCESSING FACILITY AND DISTRIBUTION CENTER (organized transportation in front of hotel Sheraton)



WEDNESDAY 18th September 2024

10:00 - 10:30

PLENARY LECTURE

Mirko Đorđević. **MITOCHONDRIAL MUTATIONS IN GENETIC BIOCONTROL OF PEST INSECTS.**

WORKING SESSION 3:

PHYSICAL CONTROL, CONTROLLED ATMOSPHERES, HERMETIC STORAGE AND EXTREME TEMPERATURES IN STORED PRODUCT PROTECTION

Moderators: Hagit Navarro and Dragana Predojević

10:30 – 10:45

Christina Müller-Blenkle, Cornel Adler. **DEVELOPMENT OF GRAIN WEEVILS AT DIFFERENT OXYGEN LEVELS DURING HERMETIC STORAGE.**

10:45 – 11:00

Thorsten Roth. **PROGRESS IN THE SUSTAINABILITY OF STORED PRODUCT PEST CONTROL WITH CARBON DIOXIDE AND ESPECIALLY IN PRESSURE DISINFESTATION.**

11:00 – 11:15

Evagelia Lampiri, Dusan Losic, Christos Athanassiou. **EFFECT OF TEMPERATURE AND RELATIVE HUMIDITY ON THE EFFECTIVENESS OF GRAPHENE ON STORED PRODUCT INSECTS.**

11:15 – 11:30

Maria Sakka, Marina Gourgouta, Christos Athanassiou. **EFFICACY OF EXTREME TEMPERATURES ON ALL LIFE STAGES OF ORYZAEPHILUS SURINAMENSIS (L.), AND EPHESTIA KUEHNIELLA ZELLER IN LABORATORY CONDITIONS.**

11:30 – 12:00

POSTER SESSION AND COFFEE BREAK

12:00 – 12:15

Yunus Emre Altunç, Maria Sakka, Marina Gourgouta, Christos Athanassiou, Ali Güncan. **PHOSPHINE RESISTANCE AND NITROGEN TREATMENT EFFICACY IN INDIAN MEAL MOTH, PLODIA INTERPUNCTELLA POPULATIONS FROM TURKISH STORED HAZELNUTS.**

12:15 – 12:30

Marina Gourgouta, Maria Sakka, Christos Athanassiou. **UTILIZING EXTREME TEMPERATURES TO CONTROL INSECT PESTS IN STORED DRIED FRUITS.**

12:30 – 12:45

Hagit Navarro, Shlomo Navarro, Nadav Inbari. **APPLICATION OF EXTREME TEMPERATURES IN DATE DISINFESTATION: SUSTAINABILITY IN PRACTICE.**

12:45 – 13:00

Stavros Rossos, Agrafioti Paraskevi, Vasilis Sotiroudas, Christos Athanassiou, Efsthathios Kaloudiss. **COMPREHENSIVE ANALYSIS OF HEAT TREATMENT APPLICATIONS IN GREECE.**

13:00 – 13:15

DISCUSSION

13:15 – 14:30

LUNCH BREAK (light lunch provided by the organisers)

WORKING SESSION 4: CHEMICAL CONTROL OF STORED PRODUCT PESTS AND PEST RESISTANCE

Moderators: Vaclav Stejskal and Snežana Tanasković

14:30 – 14:45

Vaclav Stejskal, Tomas Vendl, Barbora Frydova, Radek Aulicky.

RESISTANCE OF INTERNALLY FEEDING STORED PRODUCT PESTS TO PESTICIDES: RESULTS OF THE EU PROJECT NOVIGRAIN.

14:45 – 15:00

William R. Morrison III, Sabita Ranabhat, Jennifer Abshire, Daniel Brabec, Brian Barnett, Deanna S. Scheff, Georgina V. Bingham, Kun Yan Zhu.

REDUCED FUMIGATION IN BULK STORAGE AND INCREASED EFFICACY OF RESIDUAL INSECTICIDES WITH THE DEPLOYMENT OF LONG-LASTING INSECTICIDE NETTING.

15:00 – 15:15

Hannah Quellhorst, Maria Sakka, Georgia Baliota, Sabita Ranabhat, William R. Morrison III, Christos Athanassiou.

LABORATORY EVALUATION OF AN INSECTICIDE-IMPREGNATED NET FOR THE CONTROL OF PROSTEPHANUS TRUNCATUS.

15:15 – 15:30

Marina Gourgouta, Maria Sakka, Evmorfia Bataka, Carolyn Götze, Christos Nakas, Christos Athanassiou.

INVESTIGATING THE INSECTICIDAL EFFECTS OF PHOSPHINE ON EGGS OF MAJOR STORED PRODUCT INSECT PESTS.

15:30 – 15:45

Erin Scully, Qinglei Ming, William R. Morrison, III, Deanna Scheff, Alison Gerken, Kun Yan Zhu, James Campbell.

MOLECULAR MECHANISMS FOR INSECTICIDE RECOVERY.

15:45 – 16:00

Milica Škorić, Sonja Gvozdenac, Petar Čanak, Željko Milovac, Filip Franeta.

RESIDUAL ACTIVITY OF DELTAMETHRINE AND PIRIMIPHOS METHYL FOR SITOPHYLUS ORYZAE (L.) ON MAIZE SEEDS.

16:00 – 16:15

DISCUSSION

18:30

CONFERENCE DINNER ("Čarda kod Braše", Begečka jama 56, Begeč, organized transportation in front of hotel Sheraton)



THURSDAY 19th September 2024

10:00 – 10:30

PLENARY LECTURE

Filip Vukajlović. **THE NEW TRENDS IN ECO-EVO RESEARCH IN STORED PRODUCT ENTOMOLOGY.**

10:30 – 11:30

WORKSHOP

“**BIORATIONAL METHODS FOR STORED SEED PEST CONTROL AND PROTECTION: TO SERVE AND PREVENT BY THE SafeSeed PROJECT**”

11:30 – 12:00

POSTER SESSION AND COFFEE BREAK

WORKING SESSION 5: PREVENTION METHODS FROM POSTHARVEST TO FINAL PRODUCT

Moderators: Sara Savoldelli and Sandra Cvejić

12:00 – 12:15

Maria Otilia Carvalho. **STRATEGIES FOR SUSTAINABLE QUALITY MANAGEMENT IN STORED PRODUCTS.**

12:15 – 12:30

Cornel Adler. **PAPER-BAG SEAMS OF SEED-, FOOD-, AND FEEDBAGS: AN INVITATION TO ATTACK BY STORED PRODUCT PESTS.**

12:30 – 12:45

Camilla Albrecht, Benjamin Fürstenau. **STORED PRODUCT PROTECTION IN TIMES OF CLIMATE CHANGE - EARLY DETECTION OF PEST INSECTS INSIDE STORAGE FACILITIES AND IN THE FIELD.**

12:45 – 13:00

Sara Savoldelli, Serena Malabusini, Daniela Lupi, Costanza Jucker. **WATER ATTRACTION FOR EUROPEAN GRAIN MOTH.**

13:00 – 13:15

Sandra Cvejić, Nada Grahovac, Jelena Jocković, Sonja Gvozdenac, Nedeljko Klisurić, Jelena Ovuka, Miloš Krstić, Nemanja Ćuk, Siniša Jocić, Ana Marjanović Jeromela, Vladimir Miklič. **THE INFLUENCE OF GAS-TIGHT STORAGING OF SUNFLOWER ON SEED VITALITY, NUTRITIVE QUALITY, AND SAWTOOTHED BEETLE INFESTATIONS.**

13:15 – 13:30

Snežana Tanasković, Miloš Marjanović, Nenad Pavlović, Aleksandra Ilić, Dušan Marković. **CAN THE CHOICE OF CULTIVAR HELP PREVENT FIELD AND STORAGE INFESTATION OF COMMON BEAN WITH THE BEAN WEEVIL (ACANTHOSCELIDES OBTECTUS)?**

13:30 – 13:45

DISCUSSION

14:00 – 15:00

LUNCH BREAK (provided by the organisers)

15:00

TECHNICAL TOUR TO DANUBIUS FLOUR, PASTA AND MILL FACTORY (organized transportation in front of hotel Sheraton)



FRIDAY 20th September 2024

WORKING SESSION 6: FOOD AND FEED SAFETY

Moderators: Maria Sakka and Nikola Puvača

10:00 – 10:15

Nikola Puvača, Vojislava Bursić, Ivana Brkić, Gorica Vuković, Maria Antonietta Colonna, Giuseppina Avantaggiato, Vincenzo Tufarelli.

IDENTIFICATION OF ALTERNARIA SPP. IN STORED WHEAT GRAIN AND ITS TOXICOLOGICAL EFFECTS ON BROILER CHICKEN NUTRITION.

10:15 – 10:30

Milica Baloš, Gorica Vuković, Nikola Puvača, Antonije Žunić, Dušan Marinković, Vojislava Bursić. **DETERMINING PESTICIDE RESIDUES IN WHEAT FLOUR BY THE LIQUID CHROMATOGRAPHY TANDEM MASS SPECTROMETRY AFTER THE QUECHERS EXTRACTION.**

10:30 – 10:45

Aleksandar Vatazević, Gorica Vuković, Nikola Puvača, Miroslav Agarski, Antonije Žunić, Nemanja Aksić, Vojislava Bursić. **DETERMINATION OF ERGOT ALKALOIDS IN BUCKWHEAT FLOUR BY LIQUID CHROMATOGRAPHY COUPLED TO TANDEM MASS SPECTROMETRY.**

10:45 – 11:00

DISCUSSION

WORKING SESSION 7: STORED PRODUCT INSECTS AS FOOD AND FEED

Moderators: Cornel Adler and Miloš Petrović

11:00 – 11:15

Christos Athanassiou, Christos Rumbos, Georgia Baliota, Christina Adamaki-Sotiraki. **PROGRESS TOWARDS UTILIZING THE YELLOW MEALWORM AS FOOD, FEED AND BEYOND.**

11:15 – 11:30

Nikola Laćarac, Saša Krstović, Miloš Petrović, Teodora Feher, Aleksandra Popović. **ASSESSMENT OF LARVAL MASS CHANGES IN TENEBRIO MOLITOR REARED ON AFLATOXIN-CONTAMINATED WHEAT.**

11:30 – 12:00

FINAL REMARKS AND DISCUSSION

12:00

CLOSING CEREMONY



GENERAL INFORMATION



Hosting society

International Organisation for Biological and Integrated Control, West Palearctic Regional Section (IOBC WPRS)



Organizer

Institute of Field and Vegetable Crops, National Institute of the Republic of Serbia



Coorganizer

Faculty of Science, University of Kragujevac, Serbia



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