



**Moldova State University**  
**Institute of Genetics, Physiology and Plant Protection**

**PROGRAMME**

**Scientific International Symposium**  
**“Plant Protection - Achievements and Perspectives”**

**1-2 October, 2026**  
**Chisinau, Republic of Moldova**

**Dear**

We kindly invite you to participate at the scientific international symposium “**Plant Protection - Achievements and Perspectives**”, which will take place on October 1-2, 2026 in hybrid format with both live and virtual attendees.

**Venue:**

*October 1* - Scientific Library "Andrei LUPAN" of MSU, 1st Floor, 5A Academiei Street

*October 2* - Institute of Genetics, Physiology and Plant Protection of MSU, 20 Padurii Street

#### **INTERNATIONAL SCIENTIFIC COMMITTEE**

**ANDRONIC Larisa**, doctor habil., IGPPP, Republic of Moldova

**GAINA Boris**, acad., Republic of Moldova

**VRONSHIHI Mihail**, cor. member, Republic of Moldova

**PAMFIL Doru**, acad., Romania

**SOSNOWSKA Danuta**, prof., Poland

**SAGHITOV Abai**, acad., Kazakhstan

**BRINDZA Jan**, prof., Slovakia

**ROSCA Ioan**, prof., Romania

**BUTNARU Gallia**, prof., Romania

**TONCEA Ioan**, cor. member, Romania

**FEDORENCO Vitalie**, acad., Ukraine

**GUNCEAC Vladimir**, prof., Ukraine

#### **ORGANIZING COMMITTEE**

**Prof. Leonid VOLOSCIUC**, [orcid.org/0000-0002-7475-4310](https://orcid.org/0000-0002-7475-4310)

**Dr. hab. Larisa ANDRONIC**, [orcid.org/0000-0002-2761-9917](https://orcid.org/0000-0002-2761-9917)

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**PhD, Raisa IVANOVA**, <https://orcid.org/0000-0002-2554-2039>

**PhD, Aurelia STINGACI**, <https://orcid.org/0000-0001-6621-9919>

#### **SYMPOSIUM SECRETARIAT**

**PhD. Mihail BATCO**, [orcid.org/0000-0002-3711-4429](https://orcid.org/0000-0002-3711-4429), Tel.: +37369785040

**PhD. Svetlana SMEREA**, [orcid.org/0000-0002-1978-0452](https://orcid.org/0000-0002-1978-0452)

**PhD. Eugenia COTENCO**, [orcid.org/0000-0003-0603-3404](https://orcid.org/0000-0003-0603-3404)

**Drnd Arcadie FRON**, [orcid.org/0000-0001-9709-483X](https://orcid.org/0000-0001-9709-483X)

**SYMPOSIUM AGENDA  
THURSDAY, 1 OCTOBER**

|                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:00 – 09:30                                                                                                                                                                             | <b>Registration</b><br><b>For virtual attendees:</b><br><a href="https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1">https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1</a><br><b>or</b><br><b>Symposium identifier (ID) 835 8288 4181</b><br><b>Access code (Password): 959118</b>                                                                                                                                                                           |
| 09:30 – 10:00                                                                                                                                                                             | <b>Symposium opening</b><br><b>Greetings and Congratulations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Plenary section, Scientific Library "Andrei LUPAN", 5A Academiei Street</b><br><b>Moderators: ANDRONIC Larisa, assoc. prof., GAINA Boris, academician, VOLOSCIUC Leonid, professor</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 10:00 – 10:30                                                                                                                                                                             | <b>THE ROLE OF GENOME EDITING IN SOLVING PLANT PROTECTION PROBLEMS</b><br><b>VOLOSCIUC Leonid</b><br><i>Institute of Genetics, Physiology and Plant Protection of MSU, Republic of Moldova</i>                                                                                                                                                                                                                                                                                                                |
| 10:30 – 11:00                                                                                                                                                                             | <b>PEA WEEVIL (<i>Bruchus pisorum</i>, LINNAEUS) &amp; PEA WASP (<i>Triaspis thoracica</i>, CURTIS) IN A LOCAL POPULATION OF GARDEN PEA (<i>Pisum sativum</i> L.) CULTIVATED IN FUNDULEA/CALARASI, ROMANIA</b><br><b>Ion TONCEA</b><br><i>Romanian Association for Sustainable Agriculture (A.R.A.D.), 915200 Fundulea, Romania.</i>                                                                                                                                                                          |
| 11:00 – 11:30                                                                                                                                                                             | <b>THE ROLE OF PLANT-PATHOGEN INTERACTIONS IN PHYTOPATHOSYSTEMS: THEORETICAL AND PRACTICAL ASPECTS.</b><br><b>LUPASCU Galina</b><br><i>Institute of Genetics, Physiology and Plant Protection of MSU, Republic of Moldova</i>                                                                                                                                                                                                                                                                                 |
| 11.30-12.00                                                                                                                                                                               | <b>VICTOR GHIMPU: THE PIONEER OF TOBACCO PHYTOPATHOLOGY IN ROMANIA</b><br><b>BUTNARU Gallia</b><br><i>University of Life Sciences „King Mihai I” from Timisoara, Romania</i>                                                                                                                                                                                                                                                                                                                                  |
| 12:00 – 12:30                                                                                                                                                                             | <b>SOIL HEALTH AS A PREREQUISITE FOR CROP HEALTH</b><br><b>BOINCEAN Boris</b><br><i>National Center for Research and Seed Production, Republic of Moldova</i>                                                                                                                                                                                                                                                                                                                                                 |
| 12.30-13:00                                                                                                                                                                               | <b>TRICHOGRAMMA SPP. - AN ENTOMOPHAGOUS INSECT IN SPACE AND TIME (50 YEARS - 1976–2026)</b><br><b>GAVRILITA Lidia</b><br><i>Institute of Genetics, Physiology and Plant Protection of MSU, Republic of Moldova</i>                                                                                                                                                                                                                                                                                            |
| 13:00 – 13:30                                                                                                                                                                             | <b>Questions and Discussions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 13:30 – 14:15                                                                                                                                                                             | <b>Pause</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 14:15 – 16:00                                                                                                                                                                             | <b>POSTER SESSION</b><br><b>Moderators: SMEREA Svetlana, assoc. prof., BATCO Mihail, assoc. prof., COTENCO Eugenia, assoc. prof., MOGILDEA Anatolii, assoc. prof.,</b><br><b>For virtual attendees:</b><br><b>01.10.2026 -</b><br><a href="https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1">https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1</a><br><b>or</b><br><b>Symposium identifier (ID) 835 8288 4181</b><br><b>Access code (Password): 959118</b> |

**02.10.2026**

<https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1>

**Symposium identifier (ID) 835 8288 4181**

**Access code (Password): 959118**

<https://us05web.zoom.us/j/82306333638?pwd=IkxgzexX83tOImc2qG0Z4YmKsMkQwk.1>

**Symposium identifier (ID) 823 0633 3638**

**Access code (Password): 3i855n**

16:00 – 16:30

**Questions and Discussions**

16:30 – 19:30

**Cultural Program: Guided wine tour at Château Cojușna**

## **FRIDAY, 2 OCTOBER**

### **THEMATIC SESSIONS**

**09:00 – 09:30 Registration**

**9:30 – 16:00**

**20 Padurii str. Conference Hall of the IGPPP, Block A, floor 2.**

**Moderators: LUPASCU Galina, dr. hab, prof., m.c. ASM; BATCO Mihail, dr.**

**A. Biodiversity of harmful and beneficial organisms in natural and anthropogenic ecosystems and their role in the biocenotic regulation of the harmful organism's population density.**

**D. Genetic and physiological aspects of crop improvement for increased resistance potential and resilience to environmental stressors, diseases and pests.**

**For virtual attendees:**

<https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1>

**Symposium identifier (ID) 835 8288 4181**

**Access code (Password): 959118**

**09:30 – 16:00**

**20 Padurii str. Conference Hall of the IGPPP, Block B, floor 4, office 409**

**Moderators: VOLOSCIUC Leonid, dr. hab, prof., m.c. ASM., TODIRAS Vladimir, dr. hab., NASTAS Tudor, dr. hab.**

**B. Production and application of biological products based on entomophagy, biologically active substances, nanoparticles, entomopathogenic and antagonistic microorganisms for the protection of agricultural crops.**

**C. Integrates pest management systems with phytosanitary improvement capabilities of agroecosystems and obtaining of competitive agricultural products.**

**E. Plant protection issues for conservation, ecological and regenerative agriculture**

**For virtual attendees:**

<https://us05web.zoom.us/j/82306333638?pwd=IkxgzexX83tOImc2qG0Z4YmKsMkQwk.1>

**Symposium identifier (ID) 823 0633 3638**

**Access code (Password): 3i855n**

**16:00 – 16:30 DISCUSSION AND SUMMARIZATION**

**Conference Hall of the IGPPP, Block A, floor 2**

**For virtual attendees:**

<https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1>

**Symposium identifier (ID) 835 8288 4181**

**Access code (Password): 959118**

**FRIDAY, 2 OCTOBER**

**9:30 – 16:00 THEMATIC-SESSIONS (oral presentation)**

**A: Biodiversity of harmful and beneficial organisms in natural and anthropogenic ecosystems**

**D. Genetic and physiological aspects of crop improvement for increased resistance potential and resilience to environmental stressors, diseases and pests.**

20 Padurii str. Conference Hall of the IGPPP, Block A, floor 2

**Moderators: LUPASCU Galina, dr. hab, prof., m.c. ASM; BATCO Mihail, dr.**

**For virtual attendees:**

<https://us06web.zoom.us/j/83582884181?pwd=LuIz1vy6MaPqkcHOjm5n2vNuX3GtxR.1>

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Mechanisms of *Zeuzera pyrina*-induced structural degradation in trees

FRON Arcadie, FRON Argentina

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

*C. conica* (Araneae: Araneidae)-a potential predator of *C. arcuata* (Heteroptera: Tingidae)

ELISEEV Serghei

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Fall armyworm (*Spodoptera frugiperda* Smith)-a new pest detected in Romania

GEORGESCU Emil, CANĂ Lidia, ANTON Gabriel, BORDEI Marius Daniel, CEAN Mirela,

*National Agricultural Research and Development Institute, Fundulea, Romania*

Phytochemical characterization of *Juniperus* spp. berries using spectrophotometric and HPLC methods

HARUTYUNYAN Zara<sup>1</sup>, MIKAYELIAN Mikayel<sup>1</sup>, HARUTYUNYAN Margarita<sup>1</sup>, SOLOMONYAN Armen<sup>1</sup>, ZAKHARYAN Mariam<sup>1</sup>, IVANOVA Raisa<sup>2</sup>, ELISOVETCAIA Dina, LUTCAN Elena<sup>2</sup>

<sup>1</sup>Armenian National Agrarian University, Yerevan, Republic of Armenia; <sup>2</sup>Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

The predatory bug *Amphyareus obscuriceps* (Anthocoridae) in the greenhouse and its competitors in the food chain

IODOSOPOL Elena

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Trophic relationships of the species *Scymnus rubromaculatus* Goeze and its ability to adapt to laboratory conditions

IODOSOPOL Elena, BATCO Mihail

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Biostimulants as a factor of optimization of parent stock cultures of *Hermetia illucens* L.

MARKINA Tetiana, BARKAR Vitaliy

*Engineering and Technological Institute "Biotechnica" of the National Academy of Agrarian Sciences of Ukraine*

Effects of agroclimatic conditions on the survival and reproductive potential of the invasive species

*Halyomorpha halys* (Stal)

ZAVATIN Maria, RUSU Iuliana, NASTAS Tudor

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chişinau, Republic of Moldova*

Proteinogenic amino acid composition of indigenous soybean (*Glycine max* (L.) Merr.) varieties assessed by near-infrared spectroscopy

BÎRSAN Ana

*Moldova State University, Chişinau, Republic of Moldova*

Assessment thermotolerance in tomato progeny at the seed germination stage

BULDUMAC Ana, ANDRONIC Larisa, SALTANOVICI Tatiana, ANTOCI Ludmila.

*Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova*

Screening of wheat varieties on the CBF-A3 gene conferring resistance to cold stress

DUNICH Alina, MISHCHENKO Lidiya, MISHCHENKO Ivan, MOLODCHENKOVA Olga, DASHCHENKO Anna, FANIN Yaroslav, MOTSNYI Ivan

*Taras Shevchenko National University of Kyiv, Kyiv, Ukraine*

Breeding of *Triticum spelta*

GORE Andrei, LEATAMBORG Svetlana, ROTARI Silvia

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Influence of climatic conditions on drought tolerance and baking quality in common wheat

JELEV Natalia, GORE Andrei, DELEAN Tatiana

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Integrated approaches to improving stress resistance in tomatoes

MARII Liliana, CHITROSAN Liliana, URSACHI Olga

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Winter chickpea (*Cicer arietinum* L.) Breeding: yield, morphological traits, and ascochyta blight under eastern mediterranean conditions

MART Dürdane, TÜRKERİ Meltem, ÖZKAYA İmadettin

*Eastern Mediterranean Agricultural Research Institute, Adana, Türkiye*

Determination of yield and yield components and reactions to bacterial blight disease of winter pea (*Pisum sativum* L.) genotypes under mediterranean conditions

MART Dürdane *Eastern Mediterranean Agricultural Research Institute, Adana, Türkiye*

Aspects regarding the adaptability of certain species of the genus cuphea to combined abiotic stress

MIHAILA Victoria, GANEA Anatolie

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Impact of cold stress on wheat yield in Ukraine under global warming conditions

MISHCHENKO Ivan<sup>1</sup>, DUNICH Alina<sup>2</sup>, MOLODCHENKOVA Olga<sup>3</sup>, DASHCHENKO Anna<sup>1</sup>, MISHCHENKO Lidiya<sup>2</sup>, FANIN Yaroslav<sup>3</sup>, MOTSNYI Ivan<sup>3</sup>,

<sup>1</sup>National University of Life and Environmental Sciences of Ukraine, Kyiv; <sup>2</sup>Taras Shevchenko National University of Kyiv, Kyiv, Ukraine ;<sup>3</sup>Plant Breeding&Genetics Institute-National Center of Seed and Cultivar Investigation, Odessa

High-performance sweet sorghum hybrids for implementation in the agricultural sector  
MORARU Gheorghe, COTENCO, Eugenia, SMIRNOVA Tatiana  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

The influence of water deficit on diversity of tomato progeny at haploid level  
SALTANOVICI Tatiana, ANDRONIC Larisa, ANTOCI Ludmila, BULDUMAC Ana  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

**09:30 – 16:00 THEMATIC SESSIONS, (oral presentation)**

**B. Production and application of biological products based on entomophagy, biologically active substances, nanoparticles, entomopathogenic and antagonistic microorganisms for the protection of agricultural crops.**

**C. Integrates pest management systems with phytosanitary improvement capabilities of agroecosystems and obtaining of competitive agricultural products.**

**E. Plant protection issues for conservation, ecological and regenerative agriculture**

**20 Padurii Str. Conference Hall of the IGPPP, Block B, floor 4, office 409**

**Moderators: VOLOSCIUC Leonid, dr. hab, prof., m.c. ASM., TODIRAS Vladimir, Dr. hab., NASTAS Tudor, Dr. habil.,**

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Effectiveness of biologically active substances with kairomonal properties on the performance of the egg parasitoid *Trichogramma pintoi* Voegelé, 1982  
GAVRILITA Lidia, NASTAS Tudor  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Variations in peroxidase and catalase enzyme activity in plum tree leaves as affected by growing conditions and the biological characteristics of the cultivar  
GÎSCĂ Alina, SVETLICENCO Valentina, NICUȚĂ Alexandru  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Stimulation of the activity of the entomophage *Bracon hebetor* under the influence of kairomonal substances  
GLIBICIUC Corina, NASTAS Tudor  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

*Rheum rhabarbarum* plant extracts for the mitigation of powdery mildew severity in cucumber: optimization, antifungal screening and greenhouse validation  
LUNG Ildiko<sup>1</sup>, LUSHNYKOV Emanuela Dana<sup>1,2</sup>, JALBA Svetlana<sup>3</sup>, SORAN Maria-Loredana<sup>1</sup>, STEGARESCU Adina<sup>1</sup>, VACAR Cristina Lorena<sup>2</sup>, PODAR Dorina<sup>2,4</sup>, TODIRAS Vladimir<sup>3</sup>, OPRIȘ Ocsana<sup>1</sup>  
<sup>1</sup>National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania; <sup>2</sup>Centre for Systems Biology, Biodiversity and Bioresources (3B), Babeș-Bolyai University, Cluj-

Napoca, Romania;<sup>3</sup>Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova; <sup>4</sup>Department of Molecular Biology and Biotechnology, Babeş-Bolyai University, Cluj-Napoca, Romania

Biological plant protection and conservation of beneficial insects as key components of modern agroecosystem management

NASTAS Tudor, GLIBICIUC Corina, RUSU Iuliana, NEMERENCO Olesea, ZAVATIN Maria, LABUSNEAC Iana, GAVRILIȚA Lidia, GLADCAIA Alla

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Impact of climate change on the seasonal activity of *Helicoverpa armigera* (Hübner, 1808)

NEMERENCO Olesea

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Evaluation of mefentrifluconazole 200 g/L against grape powdery mildew (*Uncinula necator*)

ARMAȘU Svetlana, DEGTEARI Vladimir, CEBANU Vitalie, TERTEAC Dumitru, MIDARI Andrian  
National Institute of Applied Research in Agriculture and Veterinary Medicine, Chisinau, Republic of Moldova

Agrobiological features of common bean productivity formation in the Right-Bank Forest-Steppe of Ukraine  
REMENIUK Svitlana, VITIUK Oleksandr

National Academy of Agrarian Sciences of Ukraine, Institute of Bioenergy Crops and Sugar Beet, Kyiv, Ukraine

Plant health management

SCHWARTAU Victor<sup>1,2</sup>, ZOZYLYA Olexandr<sup>3</sup>

<sup>1</sup>Institute of Plant Physiology and Genetics of the NAS of Ukraine; <sup>2</sup>Institute for Evolutionary Ecology of the NAS of Ukraine; <sup>3</sup>Syngenta

Integrated pest control methods for organic autumn peas in the conditions of the Moara Domnească Experimental Station, Ilfov County

TOADER Maria<sup>1,\*</sup>, ION Viorel<sup>1</sup>, EPURE Lenuța Iuliana<sup>1</sup>, BĂȘA Adrian Gheorghe<sup>1</sup>, GEORGESCU Emil<sup>2</sup>, VASILE Mihaela Valentina<sup>1</sup>, IONESCU Alina Maria<sup>1</sup>

<sup>1</sup>University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania; <sup>2</sup>National Agricultural Research and Development Institute Fundulea, Romania

Integrated pest management (IPM) strategies of maize crop in Romania

TOADER Maria<sup>1</sup>, ION Viorel<sup>1</sup>, RADU Cristina<sup>2</sup>, CIONGA Cristina<sup>2</sup>, GEORGESCU Emil<sup>2</sup>, VASILE Mihaela Valentina<sup>1</sup>, IONESCU Alina Maria<sup>1</sup>

<sup>1</sup>University of Agronomic Sciences and Veterinary Medicine of Bucharest, Romania; <sup>2</sup>Forum of Professional Farmers and Processors from Romania (FAPPR), Romania; <sup>3</sup>National Agricultural Research and Development Institute Fundulea, Romania

Efficacy of biopreparations on seed germination and early seedling development of soybean (*Glycine max* L.)  
CHISTOL Marcela, SCERBACOVA Tatiana, VOLOSCIUC Leonid, HARCHIUC Oleg

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Drivers of oak forest decline in Romania

CIORNEI Constantin<sup>1</sup>, LUPĂȘTEAN Daniela<sup>2</sup>, RUSU Remus<sup>3</sup>, PLEȘCA Bogdan<sup>1</sup>, BOTEZATU Florin<sup>3</sup>

<sup>1</sup>National Institute for Research and Development in Forestry "Marin Dracea", Voluntari, Romania; <sup>2</sup>"Stefan

*cel Mare” University of Suceava, Faculty of Forestry, Suceava, Romania;* <sup>3</sup>*Forest District INGKA INVESTMENTS S.R.L., Bucuresti, Romania*

*Bacillus subtilis* as promising biological agent for sustainable plant protection  
COGUTEAC Ana, SCERBACOVA Tatiana  
*Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova*

Phytopathological status of the genetic material of soybean crop on two agrofondos of infection  
LENCAUTAN Marianna  
*National Center for Research and Seed Production, Selectia Sector Balti, Republic of Moldova,*

Phenology of defoliating insects associated with forest-steppe oak stands in Eastern Romania  
PLEȘCA Bogdan-Ionut<sup>1,2</sup>, CIORNEI Constantin<sup>1</sup>, LOGHIN Constantin-Cosmin<sup>1-2</sup>  
<sup>1</sup>*National Institute for Research and Development in Forestry "Marin Dracea", Voluntari, Romania*  
<sup>2</sup> *Forestry Faculty of Silviculture and Forest Engineering, “Transilvania” University of Brașov*

ToMV in water: molecular detection, phylogeny and indicator potential  
POZHYLOV Illia, KOROTIEIEVA Hanna, SHEVCHENKO Oleksiy, FILONENKO Oleksandra, BUDZANIVSKA Iryna  
*Virology Department, ESC “Institute of Biology and Medicine”, Taras Shevchenko National University of Kyiv, Ukraine*

## **DISCUSSION AND SUMMARIZATION**

Conference Hall of the IGPPP, Block A, floor 2

### **POSTER SESSION**

#### **Section A: BIODIVERSITY OF HARMFUL AND BENEFICIAL ORGANISMS IN NATURAL AND ANTHROPOGENIC ECOSYSTEMS**

Ecological management of beneficial microbiomes and entomophages for sustainable agroecosystem resilience  
ADEBAYO Rufai Quadril  
*Department of Forestry and Wildlife, Faculty of Agriculture, Zamfara State University (ZAMSUT), Talata Mafara, Zamfara State, Nigeria*

Management of plant viruses with agricultural impact  
ANDRONIC Larisa  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Ecological plant protection using biological surveillance in cropping systems  
ARIYO Adekunle Sheriffdeen  
*Zamfara State University (ZAMSUT), Talata Mafara, Zamfara State Faculty of Agriculture, Department of Forestry and Wildlife*

Advancing ecological plant protection using indigenous botanical biopesticides  
AZEEZ Awal Agboola  
*Department of Forestry and Wildlife, Faculty of Agriculture, Zamfara State University (ZAMSUT), Talata Mafara, Zamfara State, Nigeria*

Biological control procedures in integrated plum protection  
BATCO Mihail, IORDOSOPOL Elena, MUNTEAN Elena  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

*Taraxacum officinale* as a bioindicator for assessing anthropogenic pollution  
BODNARIUK Ruslana<sup>1</sup>, VAKERYCH Mykhailo<sup>1,2</sup>, HASYNETS Yaroslava<sup>1</sup>, VAKERYCH Daryna<sup>1</sup>,  
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University, Zhytomyr, Ukraine; <sup>4</sup>Institute of Plant Physiology and Genetics of the NAS of Ukraine, Kyiv,  
Ukraine

Contributions to the study of the species *Sagittaria sagittifolia* L. and *Carex pendula* Huds. in the flora of the  
"Prutul de Jos" reserves.

CASSIR Polina

"Prutul de Jos" Reserve, Slobozia Mare, Cahul, Republic of Moldova

Innovative ecological surveillance framework for early detection of emerging crop pest risks

EGWIM Onyebuchi Loui

Zamfara State University (ZAMSUT), Talata Mafara, Zamfara State, Faculty of Agricultural, Department of  
Forestry and Wildlife

Inventory of some crop wild relatives in the Telenești and Temeleuti protected areas

GANEA Anatoli, MOGÎLDA Anatolii, CUȚITARU Doina

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of  
Moldova

Evaluation of the efficacy of a fungicide applied by an XAG drone for the control of *Septoria glycines* in  
soybean

GUȚU Costel, PROZOROVSKI Maxim, RUSU Ion

National Center for Research and Seed Production, Selectia Sector Balti, Republic of Moldova

Natural regulators of the cicadad *Schaphoideus titanicus* (Cicadellidae) in vines

IODOSOPOL Elena

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of  
Moldova

*Aegilops cylindrica*: challenges for grain production and food security

KOLOIANIDI Nadiia<sup>3</sup>, KUZMINSKY Olexandr<sup>4</sup>, RYBALKA Olexandr<sup>1,2</sup>, SCHWARTAU Victor<sup>1</sup>

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- National Center of Seed and Cultivar; <sup>3</sup>Mykolaiv state agricultural research station of the Institute of  
climate-smart agriculture of the NAAS of Ukraine; <sup>4</sup>Bayer Crop Science

Taxonomic and functional profiling of vineyard chernozem microbiome

MITINA Irina, MITIN Valentin, GRAJDIERU Cristina, TUMANOVA Lidia

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of  
Moldova

Assessment of the ecological status and technogenic contamination of Uzhhorod urban soils with mobile  
forms of heavy metals

ONYSHCHUK Iryna<sup>1</sup>, KYCHKYRUK Olga<sup>1</sup>, BODNARIUK Ruslana<sup>2</sup>, VAKERYCH Mykhailo<sup>2,3</sup>,  
HASYNETS Yaroslava<sup>2</sup>, SCHWARTAU Victor<sup>4</sup>

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of Ukraine, Uzhgorod, Ukraine; <sup>4</sup>Institute of Plant Physiology and Genetics of the National Academy of Sciences of Ukraine, Kyiv, Ukraine

State of development of pests of done crops under changing weather conditions  
SAVINA Olena, HLIUDZYK-SHEMOTA Marharyta, PUNKO B., POPOVYCH Halyna, VAKERYCH Mychailo  
*Uzhhorod National University, Department of fruit and vegetable cultivation and viticulture*

Biopreparations for plant protection – the foundation for preserving the biodiversity of agroecosystems  
SCERBACOVA Tatiana  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Influence of biological preparations on restricting the development of soybean phytopathogens  
SERGIENKO Valentyna, SERGIENKO Iuriy, TYSHCHUK Olena  
*Institute of Plant Protection of the National Academy of Agrarian Sciences, Kyiv, Ukraine*

Micromorphology and anatomy of *Nigella hispanica* during the flowering stage  
SHUVALOVA Nadiia, BONDARCHUK Oleksandr, RAKHMETOVA Svitlana, HAVRYLIUK Oleksandr, LESHCHUK Nadiia, RAKHMETOV DzhamaL  
*M.M. Gryshko National Botanical Garden of the National Academy of Sciences of Ukraine, Kyiv, Ukraine,*

Mixed viral infections of allium plants in agrieosystems of Ukraine  
TAHER Kyrylo, SHEVCHENKO Tetiana, KOROTIEIEVA Hanna, ANDRIICHUK Olena, SHEVCHENKO Oleksiy, BUDZANIVSKA Iryna  
*Educational and Scientific Centre “Institute of Biology and Medicine”, Taras Shevchenko National University of Kyiv, Ukraine*

Anti-resistant herbicides compositions  
YUKHYMUK Vitalii, MORDERER Yevhen  
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## **B. PRODUCTION AND APPLICATION OF BIOLOGICAL PRODUCTS BASED ON ENTOMOPHAGY, BIOLOGICALLY ACTIVE SUBSTANCES, NANOPARTICLES, ENTOMOPATHOGENIC AND ANTAGONISTIC MICROORGANISMS FOR THE PROTECTION OF AGRICULTURAL CROPS**

Optimization of the water regime of typical chernozem in short-rotation crop rotations in the Right-Bank Forest-Steppe of Ukraine  
ATAMANIUK Oleh  
*National Academy of Agrarian Sciences of Ukraine, the V.M. REMESLO MYRONIVKA INSTITUTE OF WHEAT, Bila Tserkva Experimental Breeding Station Kyiv Region, Ukraine*

Insecticide Cypronil, OD (ciantraniliprol, 100 g/L) in the fight against cherry fruit fly (*Rhagoletis cerasi* L.) on sweet cherry in the Republic of Moldova  
DUMITRASH Iurie, MAGHER Mihail, ILIEV Petru, CHERNETS Alexandr, PRODANIUC Leonid, GENDOV Natalia, KOJOKORENKO Valerii  
*PI National for Applied Research in Agriculture and Veterinary Medicine, Chisinau, Republic of Moldova*

Ecological intensification of cereal crop protection through soil microbiome restoration  
MOHAMMED Ruth Aisha  
*Department of Forestry and Wildlife, Faculty of Agriculture, Zamfara State University (ZAMSUT), Talata Mafara, Zamfara State, Nigeria*

A predatory bug *Orius majusculus* as a biological control agent of the invasive *Echynothrips americanus*  
MUNTYAN Elena, IORDOSOPOL Elena, FILIMON Valeriu, BATCO Mihail

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Community-based ecological surveillance for sustainable management of emerging crop pests in savanna agroecosystems

NWODO Micheal Ifeanyi

Department of Forestry and Wildlife, Faculty of Agriculture, Zamfara State University (ZAMSUT), Talata Mafara, Zamfara State, Nigeria

Identification of technological solutions to ensure abiotic factors: cooling, air humidification, lighting and ventilation systems using an engineering-technological approach

PISHCHANSKA Nonna<sup>1</sup>, BELCHENKO Volodymyr<sup>1</sup>, PODMAZKO Igor<sup>1</sup>, PODMAZKO Oleksandr<sup>2</sup>

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<sup>2</sup>Odesa National University of Technology

Formation of arugula production using the "Living Fertilizer" bio preparation

POPOVYCH Halyna, HLIUDZYK-SHEMOTA Marharyta, VAKERYCH Mykhailo.

Uzhhorod National University, Uzhhorod, Ukraine

Age and sexual structure of *Halyomorpha halys* population based on pheromone monitoring in Moldova

RUSU Iuliana, ZAVATIN Maria

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Organic control strategies using microbial biopesticides in integrated pest management of walnut orchards

STINGACI Aurelia<sup>1</sup>, SCERBACOVA Tatiana<sup>1</sup>, SÜTYEMEZ Mehmet<sup>2</sup>, HARCHIUC Oleg<sup>1</sup>, STINGACI Grigorie<sup>1</sup>

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<sup>2</sup> Kahramanmaras Sutcu Imam University, Faculty of Agriculture, Department of Horticulture, Kahramanmaras, Republic of Turkey

Process analytical technology implementation in microbial pesticide production

YAROSHEVSKY Vladislav, YAROSHEVSKA Julia

Engineering and Technological Institute "Biotechnika" of the National Academy of Agrarian Sciences of Ukraine

Engineering solutions for temperature control system of bioreactor for microbial pesticides manufacturing

YASYNSKYI Serhii, YAROSHEVSKY Vladislav

Engineering and Technological Institute "Biotechnika" of the National Academy of Agrarian Sciences of Ukraine

## **Section C: INTEGRATED PLANT PROTECTION SYSTEMS**

Evaluation of pheromone lures in western corn rootworm traps

BOGACIOV Evghenii, ERHAN Tatiana

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Experience in modernizing steam sterilizers for the creation of bubble bioreactors

DOROVSKIKH Viktor, DOLZHYKOVA Irina

Engineering and Technological Institute "Biotechnika" of NAAS, Khlebodarskoye village, Odessa region, Ukraine

Determination of  $\beta$ -caryophyllene in apple extract by GC, using a commercial standard

ERHAN Tatiana, SMAGLII Vadim, ODOBESCU Vasilisa, JALBĂ Svetlana

Moldova State University, Institute of Genetics, Physiology and Plant Protection

Optimization of crop protection processes using drone-type technological systems

GORBAN Victor, TODIRAS Vladimir, POPA Alexei  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Potato late blight and early blight epidemics in current climatic conditions from South East of Transylvania and fungicide application programs

HERMEZIU Manuela, HRISTEA (Adam) Lorena  
*National Institute of Research and Development for Potato and Sugar Beet Braşov, Braşov, Romania*

Analysis of phytosanitary risks in field-grown tomatoes under natural cycles of moisture deficit and excess  
IOSOB Gabriel-Alin, ANTAL Andreea, CRISTEA Tina Oana, AMBĂRUŞ Silvana, BREZEANU Marian, BREZEANU Creola, BĂLĂIŢĂ Claudia, BENCHEA Carmina, CALARA Mariana, AVASILOAIEI Dan Ioan

*Vegetable Research and Development Station Bacau, Bacău, Romania*

Separation of caryophyllene from clove oil and its determination by gas chromatography (gc-fid)

JALBĂ Svetlana, ODOBESCU Vasilisa, ERHAN Tatiana, SMAGLII Vadim  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Preliminary testing of the effect of adding analogues of natural compounds to codling moth pheromone traps

MUSLEH Mohammed, ODOBESCU Vasilisa, ERHAN Tatiana, JALBĂ Svetlana  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Conceptual foundations of the environmental assessment of chemical protection of agricultural crops

PANCHENKO Tetyana, CHERVYAKOVA Larysa, TSURKAN Olesya  
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The application of GLOK, WDG herbicide as a key component of integrated weed management in triticale crops

ROTARU Vladimir  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Magnesium Nitrate and Trinexapac-Ethyl in the Development of Winter Wheat Yield

SCHWARTAU Victor<sup>1</sup>, MYKHALSKA Liudmyla<sup>1</sup>, MAKOVEYCHUK Tetyana<sup>1</sup>, TRETIAKOV Vadym<sup>1</sup>, ZOZYLYA Olexandr<sup>2</sup>

<sup>1</sup>*Institute of Plant Physiology and Genetics of the NAS of Ukraine;* <sup>2</sup>*Syngenta Ukraine*

Bioecological features of *Lobesia botrana* Schiff. development and the efficacy of modern insecticides in vineyards of the semi-arid region of Ukraine

SHMATKOVSKA Katerina<sup>1</sup>, SHTIRBU Andrii<sup>2</sup>

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<sup>2</sup>*National Scientific Centre "V.Ye. Tairov Institute of Viticulture and Winemaking", Tairove, Odesa Region, Ukraine*

GC application for  $\beta$ -caryophyllene quantitative analysis

SMAGLII Vadim  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Optimization of plant extracts microemulsions for agricultural pest management using multicriteria analysis

TODIRAȘ Vladimir, SORAN Maria-Loredana, JALBA Svetlana, LUNG Ildiko, OPRIȘ Ocsana  
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Efficacy of an automatic monitoring system for phytosanitary risk assessment in apple orchards

TRETIACOVA Tatiana, TODIRAS Vladimir

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## **Section D: GENETIC AND PHYSIOLOGICAL ASPECTS OF CROP IMPROVEMENT FOR INCREASED RESISTANCE POTENTIAL AND RESILIENCE TO ENVIRONMENTAL STRESSORS, DISEASES AND PESTS**

Evaluation of the agrobiological performance and fruit quality of some determinate-growth tomato

(*Lycopersicum esculentum* L.) varieties under field conditions

ANTAL Andreea<sup>1</sup>, AMBĂRUȘ Silvică<sup>1</sup>, BREZEANU Marian<sup>1</sup>, BREZEANU Creola<sup>1</sup>, CRISTEA Tina Oana<sup>1</sup>, BĂLĂIȚĂ Claudia<sup>1</sup>, CALARA Mariana<sup>1</sup>, BENCHEA Carmina<sup>1</sup>, IOSOB Gabriel-Alin<sup>1</sup>, IGNAT Andreea Beatrice<sup>1</sup>, MIHNEA Nadejda<sup>2</sup>

<sup>1</sup>*Vegetable Research and Development Station Bacau, Bacău, Romania;* <sup>2</sup>*Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova*

Molecular diagnosis of stolbur in local tomato variety Mary Gratefully

BAHSIEV Aighiuni, ZAMORZAEVA Irina

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Inbred lines of clary sage (*Salvia sclarea* L.) with high essential oil content

BALMUȘ Zinaida, COTELEA Ludmila, BUTNARAȘ Violeta

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Garlic culture – problems and solutions

BOTNARI Vasile, CHILINCIUC Alexei

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The opportunity of developing smart agriculture in conditions of variability of climate factors

BOTNARI Vasile

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Exploiting genetic diversity in tomato (*Lycopersicum esculentum*) for improved physiological performance, yield, and quality under environmental stress

BREZEANU Petre Marian<sup>1</sup>, BREZEANU Creola<sup>1</sup>, MIHNEA Nadejda<sup>2</sup>, ANTAL TREMURICI Andreea<sup>1</sup>, IOSOB Gabriel-Alin<sup>1</sup>, AVASILOAIEI Dan Ioan<sup>1</sup>, CALARA Mariana<sup>1</sup>, IGNAT Andreea Beatrice<sup>1</sup>, AMBĂRUȘ Silvică<sup>1</sup>

*Vegetable Research and Development Station Bacau, Bacău, Romania; Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Lavender hybrids resistant to abiotic factors

BUTNARAS Violeta, COTELEA Ludmila, BALMUS Zinaida

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Optimization of the feeding area and planting density of hard-stemmed garlic in Moldova to increase its productivity

CHILINCIUC Alexei, BOTNARI Vasile

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Winter garlic propagation via aerial bulblets. a breakthrough in sustainable crop production

CHILINCIUC Alexei, BOTNARI Vasile

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Variability of agro-morphological traits in SC<sub>5</sub> triticale somaclones for the selection of valuable breeding material

CIOBANU Renata

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Selection of corn hybrids for resistance to drought and salinity

CLIMENCO Oxana

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Determining the storage potential of *Trigonella foenum-graecum* seeds during *ex situ* conservation

CORLATEANU Liudmila, MIHAILA Victoria, GANEA Anatolie

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Hybrid combinations of *Salvia sclarea* L., resistant to environmental conditions

COTELEA Ludmila, BALMUȘ Zinaida, BUTNARAȘ Violeta

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Evaluation of chickpea resilience to cold stress at germination and seedling stages

CURSHUNJI Dmitri

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Effect of osmotic stress on growth and biomass accumulation in flax seedlings (*Linum usitatissimum* L.)

CUȚITARU Doina, GANEA Anatolie

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Hormesis as a theoretical basis for rational afforestation of the Republic of Moldova with different oak species

DASCALIUC Alexandru, CĂLUGĂRU-SPĂȚARU Tatiana, PARII Iulia

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Molecular surveillance of major fungal pathogens in apple using species-specific PCR

DEAGHILEVA Angela, BELOUSOVA Galina

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Effects of low doses X-ray on beech seed germination during cold stratification

ELISOVETCAIA Dina, IVANOVA Raisa, ANDRONIC Larisa

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The adaptation of grapevine assortment to climatic change conditions

GLADEI Mihai

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Evaluation of inbred maize lines for resistance to major diseases

GRAJDIERU Cristina, BILICI Elena

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Various definitions of water stress in biology and sustainable development

HARCIUC Oleg, CHISTOL Marcela, MALII Aliona

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Detection of *Fusarium* fungi and *Erwinia amylovora* in apples of four different cultivars at different stages of vegetation planted in orchards and lysimeter

IGNATOVA Zoia, CUZNETOVA Irina

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Using evolutionary approaches to protect plants from ultraviolet stress

KOLOMIETS Irina

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Sources of initial material for the selection of pink-fruit tomatoes

MAKOVEI Milania

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Adaptability of soybean genotypes obtained through experimental mutagenesis

MALII Aliona, HARCIUC Oleg

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Effects of high temperature on growth characteristics of advanced tomato breeding lines

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Genetic variability of drought tolerance in double haploid breeding of maize

MIKHAILOV Mikhail

*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

The impact of growing conditions on the productivity of plum and apple trees, depending on genotype

NICUTA Alexandru, BUJOREANU Nicolae, HAREA Ivan

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Biochemical markers of physiological adaptation in *Panicum virgatum* L. as indicators of stress resilience  
NIKISHOVA Natalia, RAKHMETOV Dzhama  
*M.M. Gryshko National Botanical Garden, National Academy of Sciences of Ukraine*

Impact of bacteriosis within pollination process on fruit set of Walnut (*Juglans regia* L.)  
PINTEA Maria  
*National Institute for Applied Research in Agriculture and Veterinary Medicine, Chisinau, Republic of Moldova*

Functional state of the photosynthetic apparatus of the wheat flag leaf *Triticum aestivum* L. under different water-supply conditions  
PLATOVSCII Nicolai, ZDIORUK Nina, GORE Andrei  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Phenotypic analysis of tolerance to abiotic stresses in triticale genotypes  
SAȘCO Elena, LEATAMBORG Svetlana  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Evaluation and selection of F3-F4 tomato hybrids comparison with the parental forms, for the purpose of highlighting genetic variability  
ȘÎROMEATNICOV Iulia, COTENCO Eugenia  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection*

Study of the variability and heritability of interspecific F5 hybrid combinations and parental forms of tomato with increased resistance under water-stressed conditions  
ȘÎROMEATNICOV Iulia, COTENCO Eugenia  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

Genotype-dependent differences in reactive oxygen species production in tomato  
UZUN Tatiana  
*Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova*

Effect of duration of osmotic stress on the growth response of wheat seedlings *Triticum aestivum* L.  
ZDIORUK Nina, PLATOVSCII Nicolai, RALEA Tudor  
*Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova*

## **Section E: PLANT PROTECTION ISSUES FOR CONSERVATION, ECOLOGICAL AND REGENERATIVE AGRICULTURE**

Corn grain storage: the role of seeds coating in altering corn vigor  
BOROVSKAIA Ala<sup>2</sup>, LUTCAN Elena<sup>1</sup>, VANICOVICI Nicolai<sup>2</sup>, ELISOVETCAIA Dina<sup>1</sup>, IVANOVA Raisa<sup>1</sup>  
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Role of tailored LED spectra on *in vitro* culture of medicinal plants  
CALALB Tatiana, LOZINSCHI Mariana, FURSENCO Cornelia, OHINDOVSCI Angelica, BOZBEI Iulia, BOGDAN Alina  
*Nicolae Testemitanu State University of Medicine and Pharmacy of the Republic of Moldova, Laboratory of Plant Biotechnologies, Center for Drug Development, Faculty of Pharmacy, Chisinau, Republic of Moldova*

Antioxidant biomarkers in assessing maize germination and seedling growth following exposure to negative temperature stress

CAUȘ Maria<sup>1</sup>, BOROZAN Pantelimon<sup>2</sup>

<sup>1</sup>Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova; <sup>2</sup>National Seed Research and Production Center, section Porumbeni, Republic of Moldova

Formalization of knowledge in the production of biological plant protection products

CHERNOVA Iryna

Engineering and Technological Institute "Biotekhnika" National Academy of Agrarian Sciences of Ukraine

Determination of the titer of a bacterial suspension of *Bacillus subtilis* CNMN-BB-06

COGUTEAC Ana, SCERBACOVA Tatiana

Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova

Global use of *Pseudomonas fluorescens* in the control of grapevine mildews

CURIEV Loredana, PINZARU Boris

Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Assessment of agrocenosis state based on Landolt's ecocoenotic scales

DRAGUTSAN Igor, KOLOMIETS Irina, NEVOIA Angela.

Moldova State University, Institute of Ecology and Geography, Chisinau, Republic of Moldova

Photosynthetic parameters of healthy and leaf-brown spot-affected soybean plants

HARCIUC Oleg<sup>1</sup>, CHISTOL Marcela<sup>1</sup>, SCERBACOVA Tatiana<sup>1</sup>, STINGACI Aurelia<sup>1</sup>, SHIMIZU Masafumi<sup>2</sup>, VOLOSCIUC Leonid<sup>1</sup>

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Water status and photosynthetic parameters of some local walnut cultivars

HARCIUC Oleg<sup>1</sup>, SÜTYEMEZ Mehmet<sup>2</sup>, CHISTOL Marcela<sup>1</sup>, SCERBACOVA Tatiana<sup>1</sup>, VOLOSCIUC Leonid<sup>1</sup>, STINGACI Aurelia<sup>1</sup>

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Hydroponic cultivation of lettuce as a sustainable approach to reducing soil-borne diseases

HLIUDZYK-SHEMOTA Marharyta

Uzhhorod National University, Department of fruit and vegetable cultivation and viticulture

Biological method of protection of apple tree from scabby in the conditions of the Western Forest-Step of Ukraine

HUNCHAK Mykhailo

Chernivtsi regional center of the state institution "Institute of soil protection of Ukraine", Ukrainian Science-Research Plant Quarantine Station IPP NAAS

Vinyl-triazole derivatives with antifungal activity against *Fusarium solani*

LUPASCU Lucian<sup>1</sup>, CRISTEA Nicolae<sup>2</sup>, STANGACI Eugenia<sup>1</sup>, CEABANOVA (ZVEAGHINTEVA) Marina<sup>1</sup>, MACAEV Fliur<sup>1</sup>

<sup>1</sup>Moldova State University, Institute of Chemistry, Chisinau, Republic of Moldova; <sup>2</sup>Moldova State University, Institute of Genetics, Physiology and Plant Protection, Chisinau, Republic of Moldova

Effect of the natural bioregulator from *Juniperus communis* on the germination and early development of corn

LUTCAN Elena, ELISOVETCAIA Dina, MASCENCO Natalia, IVANOVA Raisa

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Combined application of photosynthetic herbicides with different modes of action for winter wheat crop protection

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Starch mobilization from reserve substances of corn seeds during germination

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Impact of *Erwinia amylovora* bacteriophages on quince fructification

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Environmentally friendly protection of sweet cherry and quince against moniliosis

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Biological control of soybean pathogens using *Trichoderma lignorum* and *Pseudomonas fluorescens*

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Antagonistic effects of Trichodermin-SC and Rizoplan against walnut pathogens

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Antimicrobial potential of microorganisms after lyophilized storage

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Segetal flora in Ukraine as reservoirs of cereal viruses

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The role of cultivar and preceding crop in nature-based pest regulation in winter wheat agroecosystems  
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On the development of *Aleyrodes proletella* L. in white cabbage crops of the Right-Bank Forest-Steppe of Ukraine

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Expansion of the geographic distribution of sugarcane mosaic virus detection in Ukraine

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Bacteriophages as an innovative tool for plant bioprotection against bacterial pathogens

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The entomopathogenic bacterium *Bacillus thuringiensis* as a biological plant protection agent in conventional and organic agriculture.

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