MOLDOVA STATE UNIVERSITY

INSTITUTE OF GENETICS, PHYSIOLOGY AND PLANT PROTECTION

SCIENTIFIC ASSOCIATION OF GENETICISTS AND BREEDERS OF THE REPUBLIC OF MOLDOVA

PROGRAMME

International Scientific Conference

"Genetics, Physiology and Plant Breeding"

(VIIIth Edition)

October 7-8, 2024

Chisinau, Republic of Moldova

Dear ……

We kindly invite you to participate at the International Scientific Conference "Genetics, Physiology and Plant Breeding" (VIIIth Edition)**,** which will take place on October 7-8, 2024 in hybrid format with both live and virtual attendees.

Organizers: Moldova State University
Institute of Genetics, Physiology and Plant Protection of MSU
Scientific Association of Geneticists and Breeders of the Republic of Moldova

Venue:
October 7, 2024 - Scientific Library (Institute) "Andrei LUPAN", 5, Academiei Str.
October 8, 2024 - Institute of Genetics, Physiology and Plant Protection, MSU, 20, Padurii Str., Chisinau

INTERNATIONAL SCIENTIFIC COMMITTEE

ANDRONIC Larisa, doctor habilitatus, Institute of Genetics, Physiology and Plant Protection, MSU, Republic of Moldova
BRINDZA Jan, professor, Slovak University of Agriculture in Nitra, Slovak Republic
BUTNARU Gallia, doctor, professor, Banat University of Agriculture and Veterinary Medicine "*King Mihai I of Romania*", Timisoara, Romania
DUCA Maria, academician, Moldova State University, Republic of Moldova
ENACHE Madalin, doctor, Institute of Biology Bucharest, Romania
LUPASCU Galina, corresponding member, Institute of Genetics, Physiology and Plant Protection, MSU, Republic of Moldova
MULYUKINA Nina, corresponding member, National Scientific Centre "V. Ye. Tairov Institute of Viticulture and Winemaking" of NAAS, Odessa, Ukraine
SISCANU Gheorghe, academician, Institute of Genetics, Physiology and Plant Protection, MSU, Republic of Moldova
TABARA Valeriu, professor, The Academy of Agricultural and Forestry Sciences „Gheorghe Ionescu-Sisesti", Romania
RAKHMETOV Dzhamal, corresponding member, M.M.Grishko National Botanical Garden of NAS, Kyiv, Ukraine

ORGANIZING COMMITTEE

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CONFERENCE AGENDA

MONDAY, October 7, Scientific Library (Institute) "Andrei LUPAN"

09:00-10:00	**Registration** **For virtual attendees:** https://us06web.zoom.us/j/82267594288?pwd=vvp8A9AUb0Nk7P4nVjIw0MbbG5juNw.1 ID: 822 6759 4288
10:00-10:30	**Conference opening** **Greeting words**
Plenary section **Moderators: STEPANOV Georgeta, professor, DUCA Maria, academician** **ANDRONIC Larisa, associate professor**	
10:30-10:55	The performance of sunflower hybrids in various environmental conditions of the Republic of Moldova **Duca Maria** *Moldova State University, Chisinau, Republic of Moldova*
10:55-12:20	Small-scale grants for biodiversity in Romania "First collecting mission" **Toncea Ion** *Romanian Association for Sustainable Agriculture (Arad), Romania*
12:20-12:45	Physiological and genetic basis of mobilization, creation and rational use of the original gene fund of new cultures in Ukraine **Rakhmetov Dzhamal** *M.M.Grishko National Botanical Garden of NAS, Kyiv, Ukraine*
12:45 – 13:30 Coffee break	
13:30 – 16:30 Continuation of the plenary session **For virtual attendees:** https://us06web.zoom.us/j/82267594288?pwd=vvp8A9AUb0Nk7P4nVjIw0MbbG5juNw.1 ID: 822 6759 4288	
13:30-13:50	Grapevine pests and diseases under climate change in Ukraine **Muliukina Nina**, Liashenko Halyna, Kovalova Iryna, Buzovska Maryna, Melnik Ella, Alla Leshchenko, Andriy Nenartovych *National Scientific Centre "V. Ye. Tairov Institute of Viticulture and Winemaking" of NAAS, Odessa, Ukraine*
13:50-14:10	Transcriptome profiling of tomato response to phytoplasma infection **Mitina Irina**, Grajdieru Cristina, Bahsiev Aighiuni, Tumanova Lidia, Zamorzaeva Irina, Mitin Valentin, Juříček Miloslav, Muller Karel. *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
14:10-14:30	Extracts derived from spirulina cultivated on media with Cu and CuO nanoparticles as active agents for triticale seed priming **Cepoi Liliana**, Rudi Ludmila, Chiriac Tatiana, Zosim Liliana, Iațco Iulia, Rudic Valeriu *Institute of Microbiology and Biotechnology, TUM, Chisinau, RM*
14:30-14:50	Phenotypic plasticity and plant resistance to abiotic stress **Dascaliuc Alexandru**, Jelev Natalia, Ralea Tudor *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*

14:50-15:10	*Nicotiana* wild tobacco species – new producents for recombinant proteins expression **Tytenko Nataliia**, Volyanska Olga, Kovbasenko Raisa, Nifantova Svitlana, Emelyanov Volodymyr, Kuchuk Mykola, Symonenko Yuriy. *Institute of Cell Biology and Genetic Engineering, Kyiv, Ukraine*
15:10-15:30	Evaluation of new sources of germplasm in some species of perennial meadow grasses with a view to inclusion in the improvement program **Tod Monica**, Bălan Mironela, Andreoiu Andreea, Zevedei Paul *The Research-Development Institute for Grasslands Brasov, Romania*
15:30-15:50	Physiological strategies of plant species from *Poaceae* family under changing biotic and abiotic factors **Nikishova Natalia**, Rakhmetova Svitlana, Rakhmetov Dzhamal *M.M. Gryshko National Botanical Garden, NAS of Ukraine, Kyiv*
15:50-16:10	Efficiency of *in vitro* androgenesis in anther culture of bread winter wheat (2021-2023) **Shestopal Oksana**, Zambriborshch Iryna *Plant Breeding and Genetics Institute – National Center of Seed and Cultivar Investigation, Odessa, Ukraine*
16:10-16:30	The benefits of synergistic phenomena in plant protection with the application of biological preparations **Volosciuc Leonid** *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
Tuesday, October 8	
10.00-15.30 THEMATIC SESSIONS (oral presentation)	
Section A. **Genetic and physiological aspects of control and improvement of adaptive and productive potential in crop plants** Section B. **Principles and proceedings of increasing and quantification of genetic variability** Section C. **Genetic and physiological diversity, conservation of plant genetic resources** **Moderators: Lupascu Galina, cor. member, Smerea Svetlana, assoc. prof.**	
Conference Hall of the IGPPP, 20 Padurii Str., Block A, floor 2 **For virtual attendees:** https://us06web.zoom.us/j/82267594288?pwd=vvp8A9AUb0Nk7P4nVjIw0MbbG5juNw.1 ID: 822 6759 4288	
10:00-10:15	The role of genetic variability in the interaction of wheat with *Alternaria alternate* **Lupaşcu Galina,** Cristea Nicolae, Gavzer Svetlana *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
10:15-10:30	Pathogen-induced synthesis of calloses and phenolic compounds in winter wheat (*Triticum aestivum* L.) cultivar Renan **Emelyanov Volodymyr** [1,2], Boboshko Olena[1], Kovbasenko Raisa[2], Symonenko Yuri[2], Matushevych Nadiia[2], SchwartauVictor[1] [1] *Institute of Plant Physiology and Genetics, NAS of Ukraine, Kyiv* [2] *Institute of Cell Biology and Genetic Engineering, NAS of Ukraine, Kyiv*

10:30-10:45	Spectrophotometry analysis of carcinogenic components of potato varieties when infected by the wart casuative agent *Synchytrium endobioticum* (shilbersky) percival **Zelya Avrelia**, Vorobets George, Zelya George *Ukrainian Science-Research Plant Quarantine Station Institute of Plant Protection NAAS of Ukraine, v. Boyani, Chernivtsi region*
10:45-11:00	Identification of mycotoxin-producing species of fusarium in tomato ontogenesis **Deaghileva Angela** *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
11:00-11:15	Study of juxtaposition effect in maize using three-gene chains **Mikhailov Mikhail** *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
11:15-11:30	Foreign and domestic experience of using miscellaneous herbs in urboecosystems **Ishchuk Liubov**[1], Hrabovyj Volodymyr, Ishchuk Halyna, Didenko Inna [1] *Bila Tserkva National Agrarian University, Ukraine* [2]*- National Dendrological Park "Sofiyivka," NAS of Ukraine, Uman City* [3]*- Uman National University of Horticulture, Uman City, Ukraine*
11:30-11:45	A prospective method of interspecific hybridization in the *Cucurbita* genus **Kondratenko Serhii**, Serhiienko Oksana, Krutko Roman, Linnik Zakhar *Institute of Vegetable and Melon Growing of NAAS of Ukraine, Selection v., Kharkiv region*
11:45-12:00	Elemental composition of the aerial part of plants of the genus *Pycnanthemum* michx. **Kovtun-Vodyanytska Svitlana** *M.M. Gryshko National Botanical Garden of the NAS of Ukraine, Kyev*
12:00-12:15	Investigation of yıeld and qualıty of some chıckpea (*Cicer arietinum* L.) genotypes under medıterranean climatıc condıtıons **Mart Dürdane** *Eastern Mediterranean Agricultural Research Ens, Adana, Turkey*
12:15-12:30	Biochemical composition and nutritive value of the green mass of bird's-foot trefoil, *Lotus corniculatus* L. and alsike clover *Trifolium hibridum* L. in Republic of Moldova **Ţitei Victor** *National Botanical Garden (Institute)„Alexandru Ciubotaru", MSU, Chisinau, RM*
12:30 - 13:30 Coffee break	
13:30-13:45	Correlation of yield with quality indicators for *Triticum aestivum* L. genotypes **Pravdziva Iryna**, Shadchyna Tamara *The V.M.Remeslo Myronivka Institute of Wheat, NAAS of Ukraine, Tsentralne, Obukhiv district, Kyiv region, Ukraine*
13:45-14:00	Variability of biochemical characters in new varieties and lines of tomatoes **Mihnea Nadejda**, Rusu Vadim, Rudacova Angela, Cherdivara Ala *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
14:00-14:15	Evaluation of local maize varieties for resistance to *Fusarium spp.* **Balici Elena**

	Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM
14:15-14:30	Manifestation of heterosis in cucumber F_1 hybrids according to yield indicators in the Forest-Steppe conditions of Ukraine **Serhiienko O.V.,** Solodovnyk L.D., Harbovska T.M., Radchenko L.O. *Institute of Vegetable and Melon Growing of NAAS of Ukraine, Selection v., Kharkiv region*
14:30-14:45	The identifying of relationships between the parameters that contribute to differentiating the response of tomatoes to drought **Marii Liliana**, Andronic Larisa, Sahanovschih Marionela, Ionașcu-Urechii Angela *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
14:45-15:00	Trichoderma strains with high antifungal potential against phytopathogens **Sirbu Tamara**, Moldovan Cristina *Institute of Microbiology and Biotechnology, TUM, Chisinau, RM*
15:00-15:15	Productivity and biochemical composition of the green microalga *Haematococcus pluvialis flotow cnm-av-05* cultivated in the presence of some alcohols **Dudnicenco Tatiana** *Moldova State University, Chisinau, Republic of Moldova*
15:15-15:30	Conservation of tinctorial plant resources in the National Botanical Garden **Ciocarlan Nina** *National Botanical Garden (Institute),,Alexandru Ciubotaru", MSU, Chisinau, RM*
15:30-16:30	**On-line poster session** **Moderators: Clapco Steliana, assoc. prof., Smerea Svetlana, assoc. prof.** **For virtual attendees:** https://us06web.zoom.us/j/82267594288?pwd=vvp8A9AUb0Nk7P4nVjIw0MbbG5juNw.1 ID: 822 6759 4288

Section D. Plant protection and advanced technologies for crops cultivation **Moderators: Botnari Vasile, associate professor, Volosciuc Leonid, professor**	
Conference Hall of the IGPPP, 20 Padurii Str., Block B, floor 4 **For virtual attendees:** https://us04web.zoom.us/j/3952708736?pwd=TStRRzFoMWdmQnBRTjg2c0FWZ1lodz09&omn=74612492129 ID: 395 270 8736	
10:00-10:15	Impact of bacteriophages on the fire blight disease prevalence on quince **Samoilova Anna** *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
10:15-10:30	Methods for determining migratory activity and finding ability of *Perillus bioculatus* **Holub Yevheniia**, Markina Tetiana, Barkar Vitaly

	Engineering and Technological Institute "Biotekhnika" of NAAS of Ukraine, Odessa
10:30-10:45	Sunflower protection against spread diseases in the western Forest-steppe of Ukraine **Andriychuk Tetyana**, Skoreiko Alla, Kuvshynov Alexander *Ukrainian Science-Research Plant Quarantine Station Institute of Plant Protection NAAS of Ukraine, v. Boiany*
10:45-11:00	Drought - increased risk factor for conventional **Botnari Vasile**, Cotenco Eugenia *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
11:00-11:15	The efficacy of Sophora *(Sophora flavescens*) and Neem (*Azadirachta indica*) plant extracts in pest control under protected space Todiraș Vladimir[1], Gușan Ana[1], **Soran Maria-Loredana[2]**, Stegarescu Adina[2] *[2]National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania*
11:15-11:30	Registration of "ÇİFTÇİ" chickpea (*Cicer arietinum* L.) variety **Atmaca Evren** *Transitional Zone Agricultural Research Institute, Eskisehir, Turkey*
11:30-11:45	Wheat viruses don't know borders: identification in Ukraine, Moldova and their impact on yield under global warming **Mishchenko Lidiya** *Taras Shevchenko National University of Kyiv, Ukraine*
11:45-12:00	The study of cis-Jasmone additives for parasitoid hymenoptera attraction **Eliseev Serghei**, Fron Arcadie *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
12:00-12:15	Potato nematodes of the black sea steppe of Ukraine **Burykina Svitlana,** Uzhevska Svitlana, Nikishicheva Kateryna, Kohut Inna, Rudenko Vyacheslav *Odesa State Agricultural Experimental Station of Institute of Climate-Smart Agriculture of the NAAS of Ukraine, Khlybodarske v., Ukraine*
12:15-12:30	Antagonistic activity of bacterial isolates against *Fusarium* pathogens **Birsa Maxim,** Balan Ludmila, Bogdan-Golubi Nina, Moldovan Cristina *Institute of Microbiology and Biotechnology, TUM, Chisinau, RM*
12:30-13:30 Coffee break	
13:30-13:45	Invasion *Cydalima perspectalis* (Walker, 1859): harmfulness and control measures in the conditions of western ukrainian Foreststeppe province **Gavrilyuck Alyona** *Ukrainian Science-Research Plant Quarantine Station Institute of Plant Protection NAAS of Ukraine, v. Boyani, Chernivtsi region*
13:45-14:00	Activity of *Streptomyces* spp. from agriculture soils against phytopathogens **Burţeva Svetlana,** Birsa Maxim, Nicola Sasanelli *[1] Institute of Microbiology and Biotechnology, TUM, Chisinau, RM* *[2] Formerly Sustainable Plant Protection Institute, CNR, Italy*
14:00-14:15	Mode of attack and the devastating impact of *Zeuzera pyrina* (cossidae, lepidoptera) on orchard trees **Fron Arcadie** *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*

14:15-14:30	Grain yield and quality of winter bread wheat depending on crop processing **Kalitsinska Olesia**, Zaima Oleksii *The V.M. Remeslo Myronivka Institute of Wheat of NAAS of Ukraine, Tsentralne, Kyiv region, Ukraine*
14:30-14:45	New species of encyrtid parasite of the mealybug (*Pseudococcus* sp.) on plum in the Republic of Moldova **Iordosopol Elena** *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
14:45-15:00	Inheritance of grain number per main spike in F_1 hybrids of *Hordeum vulgare* L. **Kuzmenko Yevhenii**[1], Polishchuk Tetiana[1], Los Ruslan[1], Sukailo Mykhailo[1], Khomenko Tetiana[2], Zhytomyrets Oksana[2] [1] *The V.M. Remeslo Myronivka Institute of Wheat of NAAS of Ukraine, Tsentralne, Kyiv region* [2]*Ukrainian Institute for Plant Variety Examination, Kyiv, Ukraine*
15:00-15:15	Using the BioClass classification system for phenological forecasting **Todiras Vladimir,** Tretiacova Tatiana *Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau, RM*
15:15-15:30	Features of the technology of growing *Allium ursinum* L. in Ukraine **Pryvedeniuk Nazar,** Hlushchenko Lyudmyla *Research Station of the Medicinal Plants of the Institute of Agroecology and Environmental Management of NAAS of Ukraine, Poltava region*

15:30-16:30 On-line poster session

Moderators: Todiras Vladimir, associate professor, Erhan Tatiana, PhD

For virtual attendees:

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ID: 395 270 8736

16:30-17:00 Discussion and Summarization

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

For virtual attendees:

https://us06web.zoom.us/j/82267594288?pwd=vvp8A9AUb0Nk7P4nVjIw0MbbG5juNw.1

ID: 822 6759 4288

POSTERS

I. Section A: Genetic and physiological aspects of control and improvement of adaptive and productive potential in crop plants	
1.	Andronic Larisa. Methodological approaches to increase diversity in developing of topics in genetics and plant breeding
2.	Artiomov Laurenția, Bolocan Nistor. Aquatic actinomycetes with biocontrol potential of phytopathogenic fungi
3.	Bahsiev Aighiuni, Zamorzaeva Irina, Melian Lolita. Stolbur spread in some potato genotypes grown in the Republic of Moldova
4.	Balan Valerian, Bilici Inna, Russu Stanislav, Buza Cornel, Talpalaru Dumitru. Light intensity in the crown of cherry trees formed in dependence of the crown shape
5.	Belousova Galina, Mogîlda Anatolii. Molecular identification of *Fusarium* species in sesame seeds (*Sesamum indicum* L.)

6.	Bîrsan Ana, Iacubuță Maria, Guțu Costel. Respiratory activity in noduls of some soybean varieties (*Glycine max* (L.) Merrill.) under conditions of hydric deficit
7.	Caterenciuc Cristina. The productive potential of the mulberry in the ecological system
8.	Chisnicean Lilia, Jelezneac Tamara, Vornicu Zinaida, Baranova Natalia. Species of the *Agastache* genus from the culinary plant collection of the IGPPP of MSU
9.	Ciobanu Renata. Variability of productivity characters in triticale somaclones SC_1-SC_3 obtained by *in vitro* culture and gamma irradiation
10.	Climenco Oxana. Selection of resistant maize genotypes under salt stress and drought conditions
11.	Demydov Oleksandr, Suddenko Yuliia, Kyrylenko Vira, Humeniuk Oleksandr. Peculiarities of manifestation of the degree of transgression in populations of winter bread wheat for inheritance of breeding value elements
12.	Gîscă Alina, Popovici Ana, Svetlicenco Valentina. The influence of treating plum trees with SBA Reglalg and microelements on the activity of the photosynthetic apparatus, peroxidase and catalase
13.	Gladei Mihai. Interspecific rhizogene grapevine varieties for ecological viticulture
14.	Harciuc Oleg, Malii Aliona. Water use efficiency in biology, agriculture and sustainable development
15.	Ivanova Raisa, Tatarov Pavel, Brindza Jan. Approach to assessing the state of plant biological systems by entropy
16.	Jelev Natalia. The influence of drought on seed germination of some wheat genotypes
17.	Lutcan Elena, Ivanova Raisa, Borovskaia Alla, Elisovețcaia Dina, Spînu Angela. Impact of temperature and plant extract on maize germination
18.	Makovei Milania. Traits of tomato male gametophyte as a criterion for selection of breeding valuable forms at early stages of ontogenesis
19.	Malii Aliona. Study of X-ray influence on soybean genotypes
20.	Molodchenkova Olga, Dashchenko Anna, Mishchenko Lidiya, Lytvynenko Mykola, Motsnyi Ivan, Fanin Yaroslav, Dunich Alina, Tykhonov Pavlo, Kotikov Vsevolod. Physiological and biochemical responses of wheat to viruses and climate change
21.	Platovschii Nicolai, Zdioruk Nina, Călugăru-Spătaru Tatiana. Primary diagnostics of drought resistance of wheat genotypes under osmotic stress
22.	Rakhmetov Dzhamal, Bondarchuk Oleksandr, Rakhmetova Svitlana, Blume Yaroslav, Blume Rostyslav, Kutsokon Nataliya, Rashydov Namik. Physiological state of *Brassica carinata* plants depending on the genotype characteristics and phase of plant development in the conditions of Kyiv
23.	Saltanovici Tatiana, Andronic Larisa, Antoci Ludmila. The functionality of the male gametophyte in the offspring of virus-reinfected tomato plants
24.	Sașco Elena. The reaction of local wheat cultivars to the action of stress factors in field conditions
25.	Shevchenko Viktor, Bondarenko Oksana. Some aspects of the winter wheat photosynthetic apparatus resistance to drought
26.	Sichkar Vyacheslav, Halyna Lavrova. Breeding pulses to improve adaptive traits under conditions of general warming
27.	Țurcan Olga, Sîrbu Tamara, Moldovan Cristina, Chiselița Oleg, Chiselița Natalia. The antifungal action of *Trichoderma atrobrunneum* on some phytopathogenic fungi cultivated in the presence of substances used as stimulants in the cultivation medium

28.	Zaimenko Natalia, Rakhmetov Dzhamal, Pavliuchenko Nataliia, Didyk Nataliya, Kharytonova Iryna, Yunosheva Olena, Zakrasov Oleksandr, Dziuba Oksana, Slyusarenko Olexandr. The role of silicon in improving the biotrophic characteristics of the soil
II. Section B: Principles and proceedings of increasing and quantification of genetic variability	
1.	Cristea Nicolae, Gavzer Svetlana, Lupașcu Galina. Variability of leaf disease attack in common wheat perspective forms
2.	Grigorov Tatiana. Determination of radiosensitivity and optimal mutagenic doses of X-rays in winter barley
3.	Micu Alexandru, Bucor Nicolae. The influence of X-rays on a homozygous maize line
III. Section C: Genetic and physiological diversity, conservation of plant genetic resources	
1.	Balmuș Zinaida, Cotelea Ludmila, Butnaraș Violeta. Evaluation and selection of promising inbred lines in the species S*alvia sclarea* L.
2.	Bivol Ina. Finding an informative multilocus polymorphism in sunflower broomrape populations
3.	Corlateanu Liudmila, Mihaila Victoria, Ganea Anatolie, Doina Cutitaru. Storage potential of flax (*Linum usitatissimum* L.) Samples - an indicator of seed longevity during *ex situ* conservation
4.	Cotelea Ludmila, Balmuș Zinaida, Butnaraș Violeta. The evaluation of the initial improvement material of sage to the quantitative indices of the essential oil
5.	Curshunji Dmitri. Assessment of correlation and path analysis in collection's genotypes of chickpea
6.	Dobrojan Sergiu, Melnic Victor, Ţîţei Victor, Dobrojan Galina, Melnic Angela. The utilization of the cultural liquid of the cyanobacterium *Spirulina platensis* for the germination of *Galega orientalis* Lam. seeds. maintained in collections
7.	Dragoman Iurii, Caisin Larisa, Chisnicean Lilia. Flowering phenology of the cushion melliferous plants from the Republic of Moldova
8.	Elisovetcaia Dina, Ivanova Raisa, Fedorenco Elena. Effect of X-ray radiation on the viability of European beech seeds
9.	Gendov N., Chernets A., Kovalenko G. Conservation of biodiversity of pome rootstocks in the Republic of Moldova
10.	Izverscaia Tatiana, Ghendov Veaceslav. New findings of *Achillea ochroleuca* Ehrh. in Republic of Moldova
11.	Korablova O.A., Rakhmetov D.B., Shanaida M., Bondarchuk O.P., Vakulenko T.B. Collection fund of species and cultivars of plants *Nigella* L. Genus in M.M. Gryshko National Botanical Garden of NAS of Ukraine
12.	Lyashenko Galina, Nina Muliukina, Maryna Buzovska, Ella Melnik, Hanna Popova, Olesia Mandych. Influence of grapevine genetic and physiological features on the agroclimatic resources related yield
13.	Mart Dürdane, Türkeri Meltem. Investigating the adaptation of pea (*Pisum sativum* L.) lines and varieties under mediterranean climatic conditions
14.	Opalko Olga, Hrabovyi Volodymyr, Opalko Anatoly. Motivation for horse chestnut replacement by turkish hazel
15.	Pîntea Maria, Tăbîrţă L. Differentiation of fruit buds in walnut cultivars with terminal

	and lateral fruiting
16.	Pozniak Oleksandr, Chaban Lesya, Kondratenko Serhii. New varieties as a factor in increasing vegetable production containing inulin
17.	Romanciuc Gabriela. International taxonomic databases used in the conservation of plant genetic resources
18.	Rotari Silvia, Gore Andrei, Leatamborg Svetlana. Valorification of new winter durum wheat lines as donors of valuable characters
19.	Rudnyk-Ivashchenko O., Shevel L., Schwartau V., Mykhalska L. *Fusarium* wilt resistance of C*allistephus chinensis* (L.) Nees) of the intensity of the flower coloring
20.	Tod Monica, Bălan Mironela, Zevedei Paul, Andreoiu Andreea. Evaluation of the production and quality of the species *Alopecurus pratensis* under the specific conditions of the Brașov Depression
21.	Ţîţei Victor, Ababii Alexei, Blaj Vasile, Doroftei Veaceaslav, Gadibadi Mihai, Andreoiu Andreea, Marușca Teodor, Gudima Andei, Tod Monica, Daraduda Nicolae. Evaluation of the quality indices of the energetic phytomass of *Dactylis glomerata* L and *Festuca pratensis* Huds.
22.	Zdioruk Nina, Cuza Petru, Platovschii Nicolai. Redox potential variation in pedunculated oak leaves: an analysis of adaptive oxidative reactivity
IV. Section D: Plant protection and advanced technologies for crops cultivation	
1.	Balan Ludmila, Slanina Valerina, Bogdan-Golubi Nina. Tulpina *Pseudomonas fluorescens* CNMN-PsB-02 with stimulatory effect on common winter wheat
2.	Balan Valerian, Vamasescu Sergiu, Russu Stanislav, Buza Cornel, Talpalaru Dumitru. The effect of Pistachio Mix Plus NPA foliar fertilizer on cherry fruit yield and quality
3.	Bobokashvili Zviad, Maglakelidze Elene, Kvaliasvili Vazha. Biological and agricultural characterization of introduced variety „Weiki" (*Actinidia arguta* Planch,) in Georgia
4.	Cauș Maria. Chlorophyll index in maize plants grown from seeds treated with Reglalg and hypothermic shock
5.	Chernova Irina. Biological protection of plants: ontological approach
6.	Croitoru Nichita, Panuța Sergiu, Tălmăciu Nelea. New contributions to seed treatment with acetamiprid products in winter wheat pest reduction
7.	Curiev Loredana, Pînzaru Boris. Application of harmless ecological preparations against *Podosphaera leucotricha* in apple
8.	Dumitraș Iurie, Magher Mihail, Cojoharenco Valeriu. Application of Star 200 SP insecticide against apricot pests
9.	Gavrilița Lidia, Nastas Tudor. The efficacy of *Trichogramma evanescens* Westw. in the presence of biologically active substances with kairomonal properties in sunflower culture in field conditions
10.	Gladcaia Alla. Identification and description of the invasive species *Isodontia mexicana*
11.	Gorban Victor, Volosciuc Leonid. The control of agricultural adult crop pests using attractants and sterilisers
12.	Grosu Ion, Grițcan Sava. The peculiarities of growth and fruiting of some apricot varieties grafted on the cherry plum rootstock
13.	Holomb Lyudmila, Vakerych Mykhailo, Hasynets Yaroslava, Schwartau Victor. Detection of heavy metals in soil to determine phosphorus and potassium levels

14.	Iordosopol Elena, Muntean Elena, Batco Mihail, Filimon Valeriu, Maevschii Valentina. Study of trophic relations and voracity of the predator *Amphiareus obscuriceps* on alternative hosts
15.	Krym Inessa, Kuvshynov Oleksander. Strategy for bacterial phytopathogens spread decrease in fruit orchards
16.	Lozan Andrei. Influence of the use of Xtend modified atmosphere packages on the quality of the stored cherries of Kordia and Regina varieties
17.	Lungu Andrei, Stratulat Tatiana, Bulgar Vladimir, Crucean Stefan, Curiev Loredana, Jalba Svetlana. Phytopathological assessment and composition of *Pinus* sp. pathogens
18.	Muntyan Elena, Ciocarlan Alexandru, Kulciţki Veaceslav, Batco Mihail, Arîcu Aculina, Lungu Lidia, Blaja Svetlana, Popescu Violeta. Effect of some essential oils on *Acanthoscelides obtectus* say (*Coleoptera*: *Bruchidae*) and *Tetranychus urticae* Koch (*Acari*: *Tetranychidae*) adults
19.	Musleh Mohammed, Odobescu Vasilisa, Erhan Tatiana, Jalbă Svetlana. The evaluation of the minor component on the sex pheromone attractiveness of the plum worm
20.	Paladi Ion. The impact of monoculture on sunflower productivity in the southern part of the Republic of Moldova
21.	Paladi Ion, Volоșciuc Leonid. The peculiarities of the integrated protection of the sunflower under monoculture conditions
22.	Paladi Ion, Volоșciuc Leonid. The integrated protection of the sunflower in conventional and organic agriculture under monoculture conditions in the year 2023
23.	Panuța Sergiu, Croitoru Nichita, Tălmăciu Mihai. The biological efficiency of some products containing chlorantraniliprole 200 g/l, in the fight against apple pests
24.	Pește anu Ananie. The influence of Geneva rootstocks on the development and fruiting of apple trees after the first year of planting
25.	Pishchanska N, Belchenko V, Podmazko O. Modeling of air treatment processes in energy-efficient systems for ensuring abiotic factors in entomoculture production
26.	Popa Alexei, Todiras Vladimir, Tretiacova Tatiana, Gușan Ana. The efficacy of liquid sulfur in controlling of vine powdery mildew in organic farming
27.	Safronova Tamara, Stoyanova Kateryna, Skoreiko Alla. Growth stimulators impact on growth and productivity potato plant in culture *in vitro*
28.	Schwartau Victor, Mykhalska Liudmyla, Makoveychuk Tetyana, Tretiakov Vadym. Prevalence of herbicide-resistant weed species in Ukraine
29.	Serhieiev Leonid, Burykina Svitlana, Uzhevska Svitlana, Rudenko Vyacheslav, Vlasenko Sergiy, Khodorchuk Vasyl. The using of bio preparations against summing pests (thrips and aphids) in growing winter wheat
30.	Spinu Angela. Research on corn tolerance to drought and heat in the context of changing plant-soil-water-air relationships caused by climate change
31.	Stingaci Aurelia, Goncharuk Violeta. Eco strategies with biological products in apple orchards
32.	Șcerbacova Tatiana, Lungu Andrei, Pînzaru Boris. A preparation based on *Bacillus subtilis* testing for the protection of winter wheat from pathogens
33.	Zavtoni Pantelimon, Goncharuk Violeta. *Bacillus thuringiensis* var. *thuringiensis* in the control of Colorado beetle larvae
34.	Zubcu Ion, Todiraș Vladimir. Capture of the polyphagous pest *Epicometis hirta* Poda by applying colored non-adhesive traps with attractants

National Institutions/Organizations

- Moldova State University, Chisinau
- Institute of Genetics, Physiology and Plant Protection, MSU, Chisinau
- National Botanical Garden (Institute) „Alexandru Ciubotaru", MSU, Chisinau
- Institute of Chemistry, USM, Chisinau
- Technical University of Moldova, Chisinau
- Institute of Microbiology and Biotechnology, Technical University of Moldova
- Public Institution Scientific and Practical Institute of Horticulture and Food Technologies, Chisinau
- Institute of Pedology, Agrochemistry and Soil Protection, Chisinau
- Institute of Forestry Research and Management, Chisinau
- Public Institution National Center of Research and Seed Production, section "Porumbeni", s. Pascani
- Public Institution National Center of Research and Seed Production, section "Selecția", v. Balti
- The "Plaiul Fagului" Natural Reserve, Ungheni district, Radenii Vechi commune
- Phytosanitary Control and Protection of Fruit Plantations, Republic of Moldova, Chisinau

Institutions/Organizations from abroad

- „Ion Ionescu de la Brad" Iasi University of Life Sciences, Romania
- The Research-Development Institute for Grasslands Brasov, Romania
- Romanian Association for Sustainable Agriculture (Arad), Romania
- Bank of Plant Genetic Resources Suceava, Romania
- Vegetable Research and Development Station Buzau, Romania
- Volunteers and Maintainers of seeds, Romania
- National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca, Romania
- Bila Tserkva National Agrarian University, Ukraine
- Chernivtsi National University named Yuriy Fedkovich, Ukraine
- Department of Pharmacognosy and Medical Botany, I. Horbachevsky Ternopil National, Ukraine
- Engineering and Technological Institute "Biotekhnika" of National Academy of Agrarian Sciences of Ukraine, Odessa
- Institute of Cell Biology and Genetic Engineering, National Academy of Sciences of Ukraine, Kyiv, Ukraine
- Institute of Horticulture, National Academy of Sciences of Ukraine, Kyiv, Ukraine
- Institute of Plant Physiology and Genetics of the National Academy of Sciences of Ukraine, Kyiv, Ukraine
- Institute of Vegetable and Melon Growing of National Academy of Agricultural Sciences of Ukraine, Kharkiv region, Ukraine
- M.M. Gryshko National Botanical Garden, National Academy of Sciences of Ukraine, Kyiv, Ukraine
- Medical University, Ternopil, Ukraine
- National Dendrological Park „Sofiyivka", National Academy of Sciences of Ukraine, Uman City, Ukraine
- National Scientific Center "V. Ye. Tairov Institute of Viticulture and Winemaking" of the National Academy of Agrarian Sciences of Ukraine, Odessa region, Ukraine
- National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine
- Odessa National University of Technology, Ukraine
- Odessa State Agricultural Experimental Station of Institute of Climate-Smart Agriculture of the National Academy of Agrarian Sciences of Ukraine, Khlybodarske Village, Odessa, Ukraine
- Plant Breeding and Genetics Institute – National Center for Seed and Cultivar Investigation, Odessa, Ukraine

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- Research Station of the Medicinal Plants of the Institute of Agroecology and Environmental Management of the National Academy of Agrarian Sciences of Ukraine
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- Transcarpathian Research Expert and Forensic Center of the Ministry of Internal Affairs of Ukraine, Uzhhorod, Ukraine
- Ukrainian Institute for Plant Variety Examination, Kyiv, Ukraine
- Ukrainian Science-Research Plant Quarantine Station Institute of Plant Protection NAAS, v. Boiany, Ukraine
- Uman National University of Horticulture, Uman City, Ukraine
- Academy of Agriculture, Tbilisi, Georgia
- LEPL Scientific-Research Center of Agriculture, Tbilisi, Georgia
- Department of Plant Breeding, Swedish University of Agricultural Sciences, Alnarp, Sweden
- Eastern Mediterranean Agricultural Research Ens, Adana, Turkey
- Transitional Zone Agricultural Research Institute, Eskisehir, Turkey
- Formerly Sustainable Plant Protection Institute, CNR, Italy
- Institute of Bioorganic Chemistry, National Academy of Sciences of Belarus, Minsk, Republic of Belarus
- Institute of Experimental Botany of the Czech Academy of Sciences, Czech Republic
- Lithuanian Research Centre for Agriculture and Forestry, Republic of Lithuania
- Slovak University of Agriculture in Nitra, Faculty of Agrobiology and Food Resources, Nitra, Slovak Republic
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