

ACADEMIA DE ȘTIINȚE AGRICOLE ȘI SILVICE "Gheorghe Ionescu-Şişeşti" INSTITUTUL DE CERCETARE - DEZVOLTARE PENTRU PROTECTIA PLANTELOR

ACADEMY OF AGRICULTURAL AND FORESTRY SCIENCES "Gheorghe lonescu-Şişeşti"

RESEARCH — DEVELOPMENT INSTITUTE FOR PLANT PROTECTION

România Bucureşti Sector 1 CP 013813 Bd. Ion Ionescu de la Brad nr. 8
Tel 004-021-2693231, 33, 34, 36 Fax 004-021-2693239
e-mail: secretariat_stiintific@icdpp.ro web: www.icdpp.ro

RESEARCH - DEVELOPMENT INSTITUTE FOR PLANT PROTECTION

Research - Development Institute for Plant Protection Bucharest (www.icdpp.ro) is an important institute for agricultural research in Romania, having more than 30 years in the plant protection field and being the successor of entities with very significant achievements. By taking the technological and scientific priorities of the field, RDIPP mission is to perform innovative research on plant protection domain, assessment and analysis of the biotic and abiotic risks and crop health management in Romania.

RDIPP is a public entity performing mainly fundamental research and technological development in plant protection. Research performed at the institute focuses on controlling risk factors affecting agricultural production, mainly the biotic (phytopathogenic agents that cause loss of quality and quantity of production), but also the abiotic (due to climatic conditions such as drought and frost or resulting from air pollution). Besides the studies on pests and phytopathogens control, in the last 20 years at RDIPP the research on biological control have been a major preoccupation and priority for the specialists from RDIPP, fact demonstrated by the large number of doctoral thesis, patents, national and international scientific articles on this subject. In the RDIPP were isolated and characterized over 300 plant crop beneficial microorganisms strains (antagonists to phytopathogenic agents, plant growth promoting rhizobacteria including diazotrofs, entomopathogens, pathogen fungi for weeds). Also, one of the major preocupation of the studies is to generate new technologies for plant protection taking in consideration the EU legislation regarding the reduction of chemical input in agriculture.

The main research activities are:

- Drawing up new technologies to increase food chains safety including means and methods of biological protection against pathogens attack with a view to accomplish the sustainable development objectives in agriculture and also to complete/carry out some ecological agriculture systems
- Application of national and international strategies for research activity in plant protection
- Development and improvement of rapid diagnosis techniques for pathogens
- Eco-toxicology studies and biological tests required for plant protection products registration (according with the EU legislation)
- Consultance, expertise, analysis and technical assistance for plant protection technologies implementation
- Development of Integrated Systems for precise and sustainable management of agricultural production risks

The main research objectives are:

- Forecast and identification of the harmful agents risks.
- Risk assessment of harmful agents.
- Assessment and management of harmful agents risks (taking in account the reduction of chemical plant protection products).
- Assessment and management of plant protection products risks and the new agricultural technologies.
- Realization and development of a *collaborative research work in plant protection field*, according with the ethical requirements and responsabilities.
- Capitalization of new created knowledges. Publication of scientific papers in journals which are integrated in the worldwide knowledge flux, patent the original solutions on some technical problems with industrial applicability, broad dissemination of new created knowledge.
- *Prioritizing research*. Encouraging research excellence and innovation in line with the priorities set throught national and European research strategies in the field.
- *Collaboration*. Encourage and expand interdisciplinary research partnerships and technology transfer, networking in the European research system, development of strategic partnerships.

Representative research projects

- 1. "Alternative agricultural system based on a biocomposite mulch with multiple actions" ASTARTE CEEX
- 2. "Management of the risks associated with the wheat contamination with fusariotoxine during vegetation" GRIFOX CEEX
- 3. "Alternative agriculture system based on bioactive mulch formed from cover crops" SAMBA The program "Modernisation of Agricultural Knowledge and Information" (MAKIS) was implemented by the Project Management Unit (PMU)
- 4. "Carbon Dioxide mitigation from greenhouse gases in algal photosynthetic systems" LIFE⁺ Europe10 ENV/RO/734
- 5. "Integrated system for precise and sustainable management of the agricultural production risks specific for Dobroudja area" ISYS Romania-Bulgaria Cross-border cooperation