

## Plant genetic resources (Master PSMP, 1st Year, 1st Semester)

**Credit value (ECTS) 9**

### Course category

Synthesis (imposed)

### Course holder:

Lecturer PhD. Violeta SIMIONIUC

### Discipline objectives (course and practical works)

The aim of the course is to acquire the extensive knowledges about the plant genetic resources, like: categories, identification methods, collecting and researches, for the main agricultural plants who are cultivated in Romania.

### Contents (syllabus)

Course (chapters/subchapters)
The importance and classification of plant genetic resources
The collection and organization of plant genetic resources
Evaluation of plant genetic resources
Conservation of plant genetic resources
Methods of increasing genotypic variability in plant genetic resources
Conventional and unconventional methods of multiplication of plant genetic resources
Particular aspects on plant genetic resources for the main agricultural species
Practical works
Choosing of plants elite to the autogamic, cross-fertilized and vegetative propagation plants
Phenotypic and genotypic variability study of quantitative characters
Determining heritability of quantitative characters to progeny plants elite
Evaluation of the productivity of plant genetic resources
Evaluation of the quality of plant genetic resources
Resistance evaluation of plant genetic resources to unfavorable biotic and abiotic factors
In vitro multiplication to the agricultural species propagated vegetatively
Visit to Suceava Gene Bank

### Bibliography

Crețu A., 2000 – *Plants breeding, production and multiplication of the seeds and seedlings*, Ed. Ion Ionescu de la Brad Iasi.

Haș I., 2006 – *Seeds production to the agricultural plants*, Ed. AcademicPress, Cluj-Napoca.

Păcurar I., 2007 – *Seeds production to the cereals, leguminous and technical crops*, Ed. Phoenix, Brașov.

Murariu M., Danela Murariu, Voichița Haș, I. Haș, C. Leonte, Domnica Daniela Plăcintă, I.M. Rîșca, D.P. Simioniuc, 2012 – *Local germplasm conservation and use of maize in Romania*, Ed. Pim, Iași.

\*\*\*- [www.svgenebank.ro](http://www.svgenebank.ro).

## Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Writing and oral examination	60%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests	40%

## Contact

**Lecturer PhD. Violeta SIMIONIUC**

Faculty of Agriculture - IULS

Aleea Mihail Sadoveanu nr. 3, Iași, 700490, Romania

Phone: 0040 232 407536, fax: 0040 232 219175

E-mail: [vsimion@uaiasi.ro](mailto:vsimion@uaiasi.ro)