

GENETIC BASES OF SEED PRODUCTION

(1st Year of study, 1st Semester)

Credit value (ECTS): 9

Course category:

Synthesis study (Imposed)

Course holder:

Lecturer dr. Lucian Emil CRETU

Discipline objectives (course and practical works)

The aim of the course is to have students acquire theoretical and practical knowledge on understanding of the heredity laws, on different methods using in seed production, the knowledge of genetical structure of germoplasm.

Practical works seek to familiarize students with technical work in hereditary manipulation and using the plant heredity on different practical works in agriculture, especially in seed production.

Contents (syllabus)

Course (Chapters)
The genetical structure of autogame and alogame cultivars
The genetical structure of vegetative propagated cultivars
Androsterility and heterozis in seed production.
Poliploidy and haploidy in seed production.

Practical works
The withdrawal of test seed work portion in laboratory
The physical purity determination of seeds
The seeds authenticity determination
The seed germination determination
The seeds vigour determination
The seeds viability determination

Bibliography

1. Cretu, A. et col. – Ameliorarea plantelor, producerea si multiplicarea semintelor si materialului saditor, 2000, Edit. „Ion Ionescu de la Brad”, Iasi
2. Tirdea, Gh. - Genetica vegetala, 2002, Edit. „Ion Ionescu de la Brad”, Iasi
3. Savatti, M. et col. – Tratat de ameliorarea plantelor, 2004, Edit. Marineasa, Timisoara
4. Crăciun, T. - Geniul genetic și ameliorarea plantelor. Edit. Ceres, București, 1983.

Final evaluation

Evaluation form	Evaluation methods	Percentage of the final grade
Exam	Written/Oral examination	60%
Activity appreciation during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium	40%

Contact

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