

## **VEGETABLE SEED AND PLANTING MATERIAL PRODUCTION I (Horticultural Seed and Planting Material Production, the first year of study, first semester)**

**Credit value (ECTS): 6**

**Course category: compulsory**

**Course holder: Prof. Neculai MUNTEANU, PhD**

### **Discipline objectives (course and practical works)**

The discipline objectives consist on students training in the framework of the master programme. Horticultural seed and planting material production concerning the biological and genetical bases of the methodology of the basic seed and hybrid seeds of the main vegetable species

### **Contents (syllabus)**

<b>Course (chapters/subchapters)</b>
<b>Introductory elements: study object, links with other disciplines, short history, achievements and perspectives</b>
<b>Methodic of the vegetable seed production</b> Goal and objectives Basic seed production at the open pollinated variety Hybrid seed production at <i>solanaceous</i> vegetable plants Hybrid seed production at cole plants Hybrid seed production at cucurbit vegetable plants Hybrid seed production at onion plants Hybrid seed production at carrot plants Triploid hybrid seed production at water melons vegetable plants Hybrid seed production at asparagus plants Hybrid seed production at other species Seed production at transgenic plants
<b>Practical works</b>
Cultivar variability study
Conservative selection scheme at the main vegetable plants

### **Bibliography**

1. Bucurescu N., 1992 – *S m n a i p reg tirea acesteia pentru n s m n ri*. Ed. Ceres, Bucure ti.
2. Cirea Elena, 1993 – *Floricultura special , Curs*. Universitatea Agronomic Ia i.
3. Dumitrescu M., 1977– *Tehnologia producerii semin elor i materialului s ditor la speciile plantelor legumicole*. Editura Ceres, Bucure ti.
4. Munteanu N., 2000 – *Ameliorarea plantelor ornamentale*. Editura “Ion Ionescu de la Brad” Ia i.
5. Munteanu N., 2012 – *Producerea de semin e la plantele legumicole*. Note de curs.
6. Munteanu N., Fticeanu Marcela 2008 – *Genetica i ameliorarea plantelor ornamentale*. Editura “Ion Ionescu de la Brad”, Ia i.
7. Munteanu N., 2018 - Situation of garlic in Romania - Cercet ri Agronomice n Moldova, Vol. LI, No 2 (174): Supliment: ISSN 1379-5837
8. Mure an T., 1986 – *Producerea i controlul calit ii semin elor*. Editura Ceres, Bucure ti.
9. Potlog A., Velican V., 1971 – *Tratat de ameliorarea plantelor*, vol.I. Editura Academiei R.S.Rom nia, Bucure ti.
10. Ru ti Grigore, Munteanu N. (2008) – *Cultura fasolei de gr din urc toare*. Editura “Ion Ionescu de la Brad” Ia i, 232 pag ISBN 978-973-147-014-6.
11. Stan N., Munteanu N., 2001 – *Legumicultura*. Vol.2, Editura “Ion Ionescu de la Brad”, Ia i.

12. Stoleru V., Munteanu N., Sellitto M.V. (2013) – *New Approach of Organic Vegetable Systems*, Editura Arache, 220 pag. ISBN 978-88-548.
13. x x x – *Tehnologia culturilor de legume pentru producerea de semin e*, MAIA, DGEH-ASAS, ICLF Vidra, Bac u, 1983.
14. x x x – *Revista „Horticultura”*, 2000 - 2019.
15. x x x – *Revista „Hortinform”* - PHR, 2000 - 2019.
16. x x x – *Revista „Seed Science and Technology”*- ISTA, 2000 - 2019.

### Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Course	Exam	60%
	Presence	10%
Practical works	Presence	10%
	Tests + course and practical	30%

### Contact

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## **VEGETABLE SEED AND PLANTING MATERIAL PRODUCTION II (Horticultural Seed and Planting Material Production, the first year of study, second semester)**

**Credit values (ECTS): 7**

**Course category: compulsory**

**Course holder: Prof. Neculai MUNTEANU, PhD**

### **Discipline objectives (course and practical works)**

Discipline has as major objective to student training from the Master course Programme Horticol seed and plant material production, concerting the seed and plant material technologies for the main vegetable species.

### **Contents (syllabus)**

<b>COURSE (chapters/subchapters)</b>
General technology of the crops for seed and plant material production
Technology for seed production of the solanaceous vegetable species: tomato, pepper and egg plant
Technology for seed production of the cucurbits plants: cucumber, water melon, sweet melon, zucchini and pie squash.
Technology for seed production for the vegetable species for pods, green grain and capsules: bean, green pea, broad bean, okra
Technology for seed production and material production of the bulb species: onion, leek and garlic
Technology for seed production of root vegetables: carrot, parsley, parsnip, celery and radish
Technology for planting material and seed production for cole species, head cabbage, cauliflower and Brussels sprouts.
Technology for planting material and seed for perennial species.
Technology for the biological seed production.
<b>Practical works</b>
Establishment of the vegetable seed crops at the biennial and perennial species
Conditioning and lottization of seeds
Seed storage and commercialization
Seed analysis by the main qualitative indicators.

### **Bibliography**

1. Bucurescu N. i colab., 1992 – *S mân a i preg tirea acesteia pentru îns mân ri*. Editura Ceres, Bucure ti.
2. Dumitrescu M. i colab., 1977 – *Tehnologia producerii semin elor i materialului s dator la speciile plantelor legumicole*. Ed.Ceres, Bucure ti.
3. Munteanu N., 2000 – *Ameliorarea plantelor ornamentale*, Editura “Ion Ionescu de la Brad” Ia i.
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8. Potlog A. i Velican V. 1971 – *Tratat de ameliorarea plantelor*, vol.I. Editura Academiei R.S.România, Bucure ti.
9. Ru ti G., Munteanu N., 2008 – *Cultura fasolei de gr din urc toare*. Editura “Ion Ionescu de la Brad”, Ia i.

10. Savi chi P., Munteanu N., Andriescu I., 2013 – *Legumele din grupa verzei*. Cercetarea tiin ific , Editura “Ion Ionescu de la Brad”, Ia i.
11. Stan N., Munteanu N. (coord.), 2001 – *Legumicultura*. Vol.2, Editura “Ion Ionescu de la Brad”, Ia i.
12. x x x – *Tehnologia culturilor de legume pentru producerea de semin e*, MAIA, DGEH-ASAS, ICLF Vidra, Bac u, 1983.
13. x x x – Revista „Horticultura”, 2000-2019.
14. x x x – Revista „Hortinform”-PHR, 2000-2019.
15. x x x – Revista „Seed Science and Technology”-ISTA, 2000-2019.

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