PRODUCTION OF DENDROLOGICAL PROPAGATING MATERIAL

(Horticultural Seed and Planting Material Production, 1st Year of study, 1st Semester)

Credit value (ECTS): 5

Course category: Further study (mandatory)

Course holder: PhD /Lecturer Roberto Renato BERNARDIS

Objectives of the discipline (course and practical activity)

- Knowledge of the biological, ecological and technological peculiarities of ornamental trees and shrubs; technology for the production of tree and shrub material.
- Knowledge and proper use of the notions specific to the production of the dendrological propagating material.
- Knowledge of the biological peculiarities of the species of ornamental trees and shrubs.
- Knowledge of the technology of propagation of species of ornamental trees and shrubs
- Knowledge and proper use of the elements of recognition of dendrological species.cal and genetical bases of the metodology of the basic seed and hybrid seeds of the main vegetable species.

Contents (syllabus)

Course (chapters/subchapters)
I. The technology of production of propagating material in coniferous trees and shrubs. 1.1. Technology of production of propagating material in Abies, Araucaria, Chamaecyparis, Cryptomeria, Ginkgo, Juniperus, Larix, Picea, Pinus, Pseudotsuga
1.2. Technology of production of propagating material in Taxus, Taxodium, Thuja, Tsuga.
II. Technology of production of propagating material in broadleaf trees and shrubs. 2.1. Technology of production of propagating material in Acer, Aesculus, Ailanthus, Albizzia, Alnus, Amorpha
2.2. Technology of production of propagating material in Berberis, Betula, Buddleia, Buxus, Campsis, Caragana, Carpinus, Catalpa, Celtis, Cercis
2.3. Technology of production of propagating material in Diervilla, Elaeagnus, Euonymus,Fagus, Forsythia, Fraxinus,Genista, Gleditsia, Hedera, Hibiscus.
2.4. Technology of production of propagating material in Hippophae, Hydrangea, Juglans, Kerria, Laburnum, Ligustrum, Liriodendron, Lonicera, Maclura, Magnolia, Mahonia, Malus, Morus, Parthenocissus, Paulownia, Philadelphus, Platanus, Polygonum, Populus.
2.5. Technology of production of propagating material in Prunus, Pyrus,Quercus, Rhus, Ribes, Robinia, Rosa, Salix, Sambucus, Sophora, Spiraea, Staphyllea, Symphoricarpus, Syringa, Tamarix, Tilia, Ulmus, Viburnum, Wisteria

Practical activity
1. Organization of the dendrological nursery
2. Establishment of the dendrological nursery
3. Removing seedlings from the nursery
4. Sowing of ornamental wood species in the nursery
5. Special seed preparation works for sowing
6. Seed extraction, conditioning and preservation of seeds of dendrological species
7. Planting and transplanting of dendrological propagating material
8. Ornamental trees and shrubs formation work in the nursery

9. Generative production of dendrological propagating material (propagating material preparation, seeding and seeding care, pricking-out)
10. Vegetative production of propagating material: by slipping, marcotting, sucking and bush separation
11. Multiplication of dendrological species by dry cuttings
12. Production of propagating material by grafting
13. Recognition of coniferous trees and shrubs seeds
14. Recognition of deciduous trees and shrubs seeds

Bibliography

1. Bernardis R., 2010 - *Arboricultură ornamentală. Vol.1.* Editura „Ion Ionescu de la Brad", Iaşi.
2. Bernardis R,. 2011 - *Arboricultură ornamentală. Vol.2.* Editura „Ion Ionescu de la Brad", Iaşi.
3. Bernardis R., 2012 - *Arboricultură ornamentală. Vol.3.* Editura „Ion Ionescu de la Brad", Iaşi.
4. Bernardis R., 2016 – *Tehnologia arborilor și arbuștilor ornamentali.. Vol.1.* Editura „Ion Ionescu de la Brad", Iaşi.
5. Bernardis R., 2017 – *Tehnologia arborilor și arbuștilor ornamentali.. Vol.2.* Editura „Ion Ionescu de la Brad", Iaşi.
6. Draghia Lucia, 2000 - *Producerea materialului săditor dendrologic.* Editura „Ion Ionescu de la Brad" Iaşi.
7. Iliescu Ana-Felicia, 1998 - *Arboricultura ornamentală.* Editura Ceres Bucureşti.
8. Zaharia D., Dumitraş Adelina, 2003 – *Arboricultură ornamentală.* Editura Risoprint, Cluj-Napoca.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Final exam	Written examination	80
Evaluation of the activity during the semester	Written and oral assessments during the semester	20

Contact

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