

Ampelography I (HORTICULTURE, 4TH YEAR OF STUDY, 7TH SEMESTER)

Credit value (ECTS): 6

Course category:
specialty course (mandatory)

Course holder:
prof. Rotaru Liliana. PhD

Discipline objectives (course and practical works)

Theoretical and practical training of students in the field of ampelography, regarding: the methodology of description and recognition of the grape varieties and rootstocks; knowledge of the biological and agro-productive properties of the varieties cultivated in vineyards and wine centers in Romania; knowledge of valuable vine varieties from the main wine countries of the world.

Assimilation of the basic knowledge base necessary to understand and operate with the specific notions of the field of ampelography.

Building the capacity to identify, formulate and explain problems specific to the field of ampelography and to propose and interpret coherently solutions for solving them.

Formation of cooperation and communication skills through involvement in scientific debates specific to the viticulture field.

Contents (syllabus)

Course (chapters/subchapters)
INTRODUCTION TO AMPELOGRAPHY
The purpose and content of ampelography, as a science. Research methods used in ampelography. Brief history of ampelography
The variety, the biotype and the clone at the vine. Origin of vine varieties. Factors that modify the genetic structure of vine varieties
METHODOLOGY OF DESCRIPTION AND RECOGNITION OF VARIETIES
Ampelometric method
Use of the morphological and phenotypic characters found in the main organs of the vines
Use of ampelographic schemes for the description of the grape varieties and for the varieties of rootstocks
Use of ampelographic descriptors, according to O.I.V.
Use of modern methods (statistical-mathematical, biochemical, genetic) for the characterization of vine varieties
STUDY OF ROOTSTOCK VINES
The importance of rootstock vines. Classification of rootstock vines. Agrobiological properties of rootstocks
The group of American rootstocks, obtained by clonal selection of the species: <i>Vitis riparia</i> , <i>Vitis rupestris</i> and <i>Vitis berlandieri</i> . Rootstocks in the Riparia x Rupestris group
Rootstocks in the Berlandieri x Riparia group. Romanian rootstock selections, from the Berlandieri x Riparia group
Rootstocks in the Berlandieri x Rupestris group
European-American rootstocks
Complex hybrid rootstocks. Zoning of rootstock vines
VARIETIES OF TABLE GRAPES
Importance of table grapes varieties. The peculiarities of culture. Table grape varieties. Classification and placement of table grape varieties

Table grape varieties with extra-early and early ripening. New creations of early ripening varieties
Table grape varieties with medium ripening. New creations of medium ripening varieties.
Table grape varieties with late and very late ripening. New creations of late ripening varieties
SEEDLESS GRAPE VARIETIES
The importance of seedless varieties and the particularities of the culture. Classification of seedless grape varieties
Seedless varieties for raisins
Seedless grape varieties for fresh consumption. New creations of seedless varieties

Practical works
USE OF AMPELOGRAPHIC DESCRIPTORS
The ampelographic characters of the leaf, in the vine
The ampelographic characters of the shoots and cords
The ampelographic characters of grapes
Ampelometry of the leaf
AMPELOGRAPHIC COLLECTIONS
Organization of ampelographic collections. Scheme of organization of the ampelographic collection of the Faculty of Horticulture Ia i
The elaboration of the phenological observations files in the vine varieties. Practical applications in ampelographic collection
RECOGNITION OF THE GRAPE VARIETIES AND OF THE ROOTSTOCKS SELECTIONS
American rootstocks and Americo-American rootstocks
European-American rootstocks
Romanian selections of rootstock vines
The complex hybrid rootstocks
RECOGNITION OF TABLE GRAPE VARIETIES
Varieties with extra-early and early ripening
Varieties with medium ripening
Varieties with late and very late ripening
Romanian creations of table grapes varieties
RECOGNITION OF SEEDLESS VARIETIES
Old seedless varieties, for raisins
Seedless varieties for fresh consumption

Bibliography

Dobrei A., Rotaru Liliana, Dobrei Alina, 2017 - *Viticultur , Ampelografie, Oenologie*, Editura Solness, Timi oara, ISBN 978-973-729-523-1

Damian Doina, Rotaru Liliana, Nechita Ancu a, Savin Costic , 2011 - *Ampelografie - Metode i metodologii de descriere i recunoa tere a soiurilor de vi de vie*. Editura Pim, Ia i, ISBN 978-606-130-618-3.

Dobrei Alin, Rotaru Liliana, Morelli Silvano, 2008 – *Ampelografie*. Editura “Solness”, Timi oara, ISBN 978-973-729-120-2.

Dobrei Alin, Rotaru Liliana, Mustea Mihai, 2005 – *Cultura vi ei de vie*. Editura “Solness”, Timi oara, ISBN 973-729-031-3.

Gl man Gh., Dejeu L., Brîndu e Elena, erdinescu A., Marian I. (coordonatori), 2018 – *Ampelografia României, vol. IX (Soiuri noi de viță de vie și portaltoi creați în România)*. Editura Ceres, Bucure ti, ISBN 978-973-40-1127-8

Indrea Adriana, Vi an Lumini a, 2000 – *Principalele soiuri pentru struguri de mas cultivate în România*. Editura “Ceres”, Bucure ti, ISBN 973-40-0469-7.

Rotaru Liliana, Vasile Ancu a, Nechita Bogdan, Niculaua Marius, Colibaba Cintia, 2011 - *Modernizarea tehnologiei de obinere i valorificare a strugurilor de mas prin implementarea sistemului european de calitate Eurepgap*. Editura "Ion Ionescu de la Brad", Ia i, ISBN 978-973-147-090-0.

ârdea C., Rotaru Liliana, 2003 - *Ampelografie vol. I (ampelografia general i vi ele portaltai)*. Editura "Ion Ionescu de la Brad", Ia i, ISBN 973-8014-94-8.

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X X X, 1958-1970 – *Ampelografia R.P.R., volumele I-VIII*, Editura "Academiei R.P.R." Bucuresti.

Evaluation

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

Contact

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Ampelography II (HORTICULTURE, 4TH YEAR OF STUDY, 8TH SEMESTER)

Credit value (ECTS): 4

Course category:
specialty course (mandatory)

Course holder:
prof. Rotaru Liliana, PhD

Discipline objectives (course and practical works)

Knowledge of the biological, ecological, agrotechnical and managerial bases of the cultivation of vines in a certain wine-growing area.

Acquiring the theoretical and practical knowledge regarding the strategy of the correct use of genetic resources in viticulture, in order to obtain quality productions.

Knowledge of the principles of design, execution and operation of a vineyard plantation, in accordance with the constraints and socio-economic opportunities.

Development of a unitary system of knowledge through the coherent use and interpretation of principles and models from the field of rational use and exploitation of genetic viticultural resources; integration of the knowledge regarding the culture of vines in the context of the sustainable development of humanity.

Contents (syllabus)

Course (chapters/subchapters)
1. WINE GRAPE VARIETIES
Importance of wine grapes varieties. The agrobiological characteristics, the cultural particularities and the technological properties of the wine grapes varieties. Classification of the wine grapes varieties
Local grape varieties for white table wines (current consumption). Foreign varieties for white table wines, grown in Romanian vineyards. New varietal creations for white table wines
Local varieties for white quality wines. Foreign varieties for white quality wines. New varietal creations for white quality wines
Local and foreign varieties for rose and red table wines (current consumption). New creations of varieties for rose and red table wines.
Local and foreign varieties for red quality wines. New creations of varieties for red quality wines.
Varieties for aromatic wines. New creations of varieties for aromatic wines
DIRECT PRODUCER HYBRIDS
General considerations on direct producer hybrids
Classification of direct producer hybrids
The agrobiological and technological peculiarities of the direct producer hybrids
The particularities of culture of the direct producer hybrids.
Main direct producer hybrids
Practical works
1. RECOGNITION OF WHITE WINE VARIETIES
Local grape varieties for white table wines (current consumption)
Foreign varieties for white table wines (current consumption)
Local varieties for white quality wines
Foreign varieties for white quality wines
RECOGNITION OF RED WINE VARIETIES
Local and foreign varieties for rose and red table wines (current consumption)
Local varieties for red quality wines

Foreign varieties for red quality wines
RECOGNITION OF AROMATIC WINE VARIETIES
Local varieties for aromatic wines
Foreign varieties for aromatic wines
RECOGNITION OF DIRECT PRODUCER HYBRIDS
Old direct producer hybrids
New direct producer hybrids
Grape varieties with biological resistance
Year project
The study of climatic and edaphic factors
Orographic, hydrographic and vegetation study
Choosing the grape variety and rootstocks
Determination of the planting distances
Choosing the trellising system and the type of cutting for the vines in the plantations
Organization of the land in operating units
The anti-erosion arrangement of the land for planting the vines
Installation of the support system in the plantation
The maintenance works of the vines in the Ist, IInd, IIIrd, IVth years from the planting
Creation of the technological files

Bibliography

Dobrei A., Rotaru Liliana, Dobrei Alina, 2017 - *Viticultur , Ampelografie, Oenologie*, Editura Solness, Timi oara, ISBN 978-973-729-523-1

Damian Doina, Rotaru Liliana, Nechita Ancu a, Savin Costic , 2011 - *Ampelografie - Metode i metodologii de descriere i recunoa tere a soiurilor de vi de vie*. Editura Pim, Ia i, ISBN 978-606-130-618-3.

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Indrea Adriana, Vi an Lumini a, 2001 – *Principalele soiuri pentru struguri de vin cultivate în România*. Editura “Ceres”, Bucure ti, ISBN 973-40-0515-4.

Rotaru Liliana, 2009 - *Soiuri de vi de vie pentru struguri de vin*. Editura “Ion Ionescu de la Brad”, Ia i, ISBN 978-973-147-030-6.

X X X, 1958-1970 – *Ampelografia R.P.R., volumele I-VIII*, Editura “Academiei R.P.R.” Bucuresti.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Course	Exam	60%
	presence	10%
Practical works	Tests	30%
Project	Project submission	100%

Contact

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