



BSc Programme – Forestry

FOR 221 Forest Non-wood Resources

(Non-timber forest resources)

Compulsory subject – in 4th /summer/ semester for Bulgarian students

ECTS credits – **5.5** Ability to teach a foreign language – **English**

Syllabus in brief

Summary: The course aims at obtaining basic information about the non-timber forest resources harvested traditionally on the territory of the forests and forest land. These resources include medicinal and aromatic plants (MAPs), forest fruits, fodder resources, edible mushrooms, resin and other products. The resources are studied with the aim of their proper sustainable management and use.

I. Topics of the lectures:

1. Raw materials for industry. Resin harvesting. Cork and bark harvesting. Phloem and needles harvesting.
2. Fodder resources. Grazing in the forest ecosystems. Maintained pastures. Use of the leaves, branches, fruits and seeds of the arboreal species for livestock forage.
3. Honey-bearing plant resources.
4. Special services of the forest land. Christmas tree plantations. Charcoal production. Other products.
5. Plant resources. Forest fruits – classification, distribution, nutritive and medicinal properties.
6. Plant resources. Medicinal and aromatic plants (MAPs). Chemical composition, types of raw materials, application.
7. Forest mushrooms (fungi). Classification, distribution, and identification. Main traits for identification.
8. Forest mushrooms (fungi). Ecological and trophic groups. Classification.
9. Cultivation of MAPs.
10. Cultivation of mushrooms.
11. Cultivation of forest fruit trees and shrubs.
12. Inventory of the resources.
13. Primary processing of the non-timber forest products.
14. Forest services.

II. Exercises (Lab courses):

I. Fodder species:

- Fam. Fabaceae.
- Fam. Poaceae.
- Plants of other families.

II. Honey-bearing plants:

- Fam. Rosaceae.
- Fam. Lamiaceae.
- Plants of other families.

III. Forest fruit species.

IV. Medicinal and aromatic plants:

- Aromatic plants
- Alkaloids-containing plants
- Glucosides-containing plants
- Other MAPs

V. Mushrooms:

- Classis Ascomycetes.
- Classis Basidiomycetes. Fam. Agaricaceae. Fam. Amanitaceae.
- Classis Basidiomycetes. Fam. Boletaceae, Fam. Cantarellaceae.
- Other families of mushrooms.

III. Practical training:

Routing transition in Vitosha Nature Park – examples and discussion.

Prepared by:

Asist. Prof. Dr. Slavcho Savev

Department of Silviculture

Faculty of Forestry

University of Forestry

Sofia, Bulgaria

e-mail: ssavev@abv.bg