Plant pathology (IIIrd Year of study, Vth and VIth Semester)

Credit value (ECTS) Sem. I=5, Sem. II=5

Course category
Compulsory courses

Course holder:
PhD, Prof. Eugen ULEA

Discipline objectives (course and practical works)

The analytical program aims to instill the knowledge by students concerning etiology, symptomatology, the epidemiology and measures for prevention and control of plant disease. Practical application aims to familiarize students with the technical work in the laboratories of plant protection, and with the recognition of disease.

Contents (syllabus)

Course (chapters/subchapters)
Semester V
Phytopathology as a science.
General notions about plant diseases
Infectious phytopathogenic agents overview
Phytopathogenic agents
Infectious diseases pathogenesis
Epidemiology of parasitic diseases
Preventing and combating plant diseases
Measures to prevent the intoxications and pollution in plant protection
Semester V
Cereal diseases
Peas and beans diseases
Diseases of root and tuber crops
Oily plant diseases
Fodder plant diseases
Diseases Non-food crops
Diseases of medicinal and aromatic plants
Tree diseases
Practicum
Semester V
Parasitic aspects- anatomical and morphological changes produced by viruses, mycoplasma, bacteria and pathogenic fungi
Phytopathological material harvest
Micromycetes morphology
Vegetative reproduction and asexual reproduction of micromycetes
Sexual reproduction: oospore, zygospore, ascus.
Sexual reproduction: basidium
Prevention and control of diseases caused by pathogens in plants
Peas and beans diseases

Potato diseases: viruses and bacteriosis
Potato diseases: mycosis
Sugar -beet diseases
Fodder plant diseases
Summary Seminar -Colloquium
Semester VI
Wheat diseases: powdery mildew, canker, *Fusarium* root, septoriosis, smut and rust
Barley diseases
Oat diseases
Corn diseases
Sunflower diseases
Apple, pear and quince trees diseases
Plum diseases
Cherry, apricot and peach diseases
Grapevine diseases
Vegetables diseases: tomato, pepper, cucumber, onion
Summary Seminar -Colloquium

References

1.Baicu, T. şi colab.: *Sisteme de combatere integrată a bolilor şi dăunătorilor pe culturi*. Ed. CERES, Bucureşti, 1986.

2. Baicu, T.: *Îndrumător pentru folosirea pesticidelor*. Ed. CERES, Bucureşti, 1979.

3. Bontea Vera : *Ciuperci parazite şi saprofite din România*, Edit. Academiei Republicii Socialiste România, Bucureşti, Vol. I, 1985.

4. Docea, E. şi colab.: *Ghid pentru recunoaşterea şi combaterea bolilor plantelor agricole*. Vol. I şi II, Ed. CERES, Bucureşti, 1990 şi 1991.

5. Dumitraş Lucreţia, Seşan Tatiana: *Bolile plantelor industriale - prevenire şi combatere*. Ed. CERES, Bucureşti, 1988.

6. Hatman, M. şi colab.: *Fitopatologie*. E.D.P. Bucureşti, 1989.

7. Hatman, M. şi colab.: *Protecţia plantelor*. Ed. CERES, Bucureşti, 1986.

8. Henegar Monica, Andru Monica, *Codexul produselor de protecţie a plantelor omologate pentru utilizare în România*, Ed.Andagra, Arad, 2013.

9. Hulea, Ana şi colab.: *Bolile şi dăunătorii cerealelor*. Ed. CERES, 1975.

10.Iacob Viorica: *Bolile plantelor cultivate-prevenire şi combatere*, Ed. ”Ion Ionescu de la Brad”, Iaşi, 2008.

11. Janse J.D.: *Phytobacteriology –Principles and practice* ,Ed. CABI Publishing, USA, 2009.

12. Parry D.: *Plant pathology in agriculture*, Cambridge University Press, New York,1990 .

13. Pop I.V.:*Tratat de virologie vegetală II, Virusurile culturilor de câmp*, Edit.Printech, Bucureşti, 2009

14. Rădulescu E., Rafailă C.: *Tratat de fitopatologie agricolă vol. I-IV*, Ed. Academiei Prepublicii Socialiste România, Bucureşti 1970.

15. Şandru I.D.: *Protejarea culturilor agricole cu ajutorul pesticidelor*, Ed.Helicon, Timişoara, 1996.

16. Severin V., Kupferberg Simona, Zurini I.: *Bacteriozele plantelor cultivate*, Edit.Ceres, Bucureşti, 1985 .

17.**Ulea, E**.: *Fitopatologie*. Ed. Ion Ionescu de la Brad, Iaşi, 2003.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Oral examination	60%
Appreciation of the activity during the semester	Test+ practical application+ herbarium	40%

Contact

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