

Entomology (IInd Year of study, IIIrd SEMESTER)

Credit value (ECTS) 4

Course category

Domain (Imposed)

Course holder:

Assist. Prof. Dr. Nela T LMACIU

Discipline objectives (course and practical works)

The course aims at formation base necessary fundamental knowledge and understanding of working with concepts specific to the field of entomology at the same time discipline aims to identify students with the main morphological and anatomy characters of insects, biology, ecology and controlling principal pests of ornamental improvement.

Practical works seek to familiarize students with the technical identification of the main pests in flower plant, forest and ornamental trees and bushes in parks and gardens and knowledge of general notions regarding the main methods of prevention and pest control; knowledge of the types of pesticide, knowing core group of pesticides used in the pest control.

Contents (syllabus)

Course (chapters/subchapters)
The object of study, the history and the importance of microbiology.
General characteristics of insects: morphology and anatomy of insects.
Insect Biology: Reproduction in insects; Insect development; Generations and evolutionary cycle; Diapause.
Insect Ecology: Factors influencing the development of insects;
Detection and prognosis of pests: pest detection methods; methods of prognosis.
Methods used in pest control: preventive methods; curative measures; integrated control.
Insect pests of ornamental trees and bushes: dispersion, description, biology, ecology, plants attacked and method of pest prevention measures and control.
Insect pests of flowering plants in parks and gardens: dispersion, description, biology, ecology, plants attacked and method of pest prevention measures and control.

Practical works
The morphology of the insect body: structure of the head, chest, abdomen and their appendices.
Insect development. Larvae and pupae types
Key dichotomy to determine the main orders of insects.
Types of pest. Chemical control of pests.
Dispersion, description, biology, ecology, plants attacked and method of pest prevention measures and control ornamental trees and bushes: <i>Quadraspidiotus perniciosus</i> , <i>Eriosoma lanigerum</i> , <i>Aphis pomi</i> , <i>Cossus cossus</i> , <i>Zeuzera pyrina</i> , <i>Operophtera brumata</i> , <i>Hyphantria cunea</i> , <i>Malacosoma neustria</i> , <i>Aporia crataegi</i> , <i>Melolontha melolontha</i> , <i>Lytta vesicatoria</i> , <i>Galerucella luteola</i> , <i>Melasoma populi</i> , <i>Leucoma salicis</i> , <i>Ruguloscolytus rugulosus</i>

Dispersion, description, biology, ecology, plants attacked and method of pest prevention measures and control flowering plants in parks and gardens: *Tetranychus urticae*, *Aulacaspis rosae*, *Macrosiphum rosae*, *Arge rosae*, *Ardis brunniventris*, *Trialeurodes vaporariorum*, *Meloidogyne incognita*, *Aphis grossulariae*, *Hemitarsonemus pallidus*, *Gryllotalpa gryllotalpa*.

Bibliography

1. Filipescu C., Georgescu T., T Imaciu M., 1989 - Practical works of Entomology. The general part. Internal use, Iasi.
2. Ghizdavu I., Pa ol P., P l ge iu I., Bobîrnac B., Filipescu C., Matei Iulia, Georgescu T., Baicu T., B rbulescu Al., 1997 - Agricultural entomology. Didactic and Pedagogical Publishing House R.A., Bucharest.
3. B rbulescu Al., 1997 - Agricultural entomology. Didactic and Pedagogical Publishing House R.A., Bucharest.
4. Perju T., 1995 - Agricultural entomology, component of the integrated protection of agrosystems. Ceres Publishing House, Bucharest.
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6. T Imaciu M., 2003 - Plant protection - Entomology. "Ion Ionescu de la Brad" Publishing House Iasi.
7. T Imaciu M., 2005 - Agricultural entomology. "Ion Ionescu from Brad" Iasi.
8. Ro ca I., Oltean I., Mitrea I., Talmaciu M., Petanec D., Bunescu H., Istrate Rada, Talmaciu Nela, Stan C., Micu Lavinia, 2011 - Treaty of general and special entomology. Alpha MDN Publishing House , Buzau.
9. Talmaciu Nela, 2014 - Protection of ornamental plants. Iasi Performantica Publishing House

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Written examination	70%
Appreciation of the activity during the semester	Oral assessment during the semester, verification tests and final laboratory colloquium.	30%

Contact

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