

## **Biological invasion (Ist Year of study, Ist Semester)**

**Credit value (ECTS): 4**

### **Course category**

**Compulsory courses**

### **Course holder:**

**PhD, Prof. Eugen ULEA**

### **Obiectivele disciplinei (curs și aplicații)**

The analytical programme aims to provide students with knowledge of conservation biology, identification of invasive species and, implicitly, investigation of natural biodiversity, in which a particularly important place is held by molecular phylogeny, a tool common to several scientific fields such as systematics, genetics, ecology and evolutionism.

Plant health is fundamental to the sustainability and competitiveness of agriculture, food safety and environmental protection. The introduction and establishment of harmful organisms in Romania may result in increased quantities of plant protection products used, which is contrary to the provisions of the Directive on the sustainable use of plant protection products.

### **Conținutul disciplinei (programa analitică)**

<b>Curs (Capitole/subcapitole)</b>
General considerations on the impact of biological invasion on natural biodiversity,
Impact of biological invasion on natural ecosystems
Impact of biological invasion on the economy and human society
Monitoring biological invasive organisms
Quarantine legislation

<b>Practicum</b>
To ensure the phytosanitary protection of the territory of Romania/Community by preventing the introduction, establishment and spread of quarantine organisms harmful to plants, plant products or other objects not known to occur in the Community
Ensuring the use of healthy planting material from the beginning of the production chain by preventing the spread of harmful organisms that are introduced into the Community with the planting material;
Control of harmful organisms which have a limited distribution and require strict official control measures to prevent spread;
Monitoring the quality of plant protection products and control of plant protection products in marketing and use;
Ensuring public health, food safety, users and the environment by implementing annual monitoring programmes for pesticide residues in plants and plant products from domestic production, intra-Community market and those intended for export
Coordination, technical guidance and control of activities in the field of approval and re-registration of plant protection products for use in Romania

Implementation of the National Action Plan on risk mitigation related to the use of plant protection products.

### **Bibliografy**

1. Kühn I., Klotz S. 2003 - The alien flora of Germany - basics from a new German database. In: Child L.E., Brock J.H., Brundu G., Prach K., Pyšek P., Wade P.M., Williamson M. (eds). Plant invasions: ecological threats and management solutions, pp. 89/100. Backhuys Publ., Leiden.
2. Lambdon Ph.W., Pyšek P., Basnou C., Hejda M., Arianoutsou M., Essl F., Jaroší V., Pergl J., Winter M., Anastasiu P., Andriopoulos P., Bazos I., Brundu G., Celesti-Grapow L., Chassot Ph., Delipetrou P., Josefsson M., Kark S., Klotz S., Kokkoris Y., Kühn I., Marchante H., Perglová I., Pino J., Vilà M., Ziko A., Roy D., Hulme Ph.E. 2008 - Alien flora of Europe: species diversity, temporal trends, geographical patterns and research needs. Preslia, 80:101–149

### **Evaluation**

<b>Evaluation form</b>	<b>Points no.</b>	<b>Percentage of the final grade %</b>
Presence at the course	1	10
Appreciation of the activity during the semester	3	30
Exam	6	60
<b>Final note</b>	<b>10</b>	<b>100</b>

### **Contact**

**PhD, Prof. Eugen ULEA**

Faculty of Agriculture - IULS Iași

Aleea Mihail Sadoveanu nr. 3, Iași, 700490, Romania

telefon: 0040 232 407526, fax: 0040 232 219175

E-mail: [eulea@uaiasi.ro](mailto:eulea@uaiasi.ro)