

Biological Invasion

Lecturer: Prof. Dr. Ferenc Lakatos; Dr. Ágnes Csiszár PhD.

Institute: University of Sopron, Faculty of Forestry, Institute of Sylviculture and Forest Protection; Institute of Botany and Nature Protection

Course code: EG608-000B0

Credit points: 5

Time table: Lecture:2/Lab:1

Language: English

Course description

Topics

Lectures: National and international activities in the field of biological invasions. Overview the concepts and definitions. Analysis of features favouring invasive species. Recent examples of plant and animal invasion worldwide. The most important invasive microorganism, plant and animal species occurring in Hungary: morphology, taxonomy, origin, distribution, life cycle, biotic interactions, habitat preference, economic importance, nature conservation significance. The role of „green corridors” in spreading of invasive plant species. The role of international trade in the distribution of pathogens and animal species. Theoretical and practical background of control and eradication.

Seminars: Field trips to the invaded habitats. Discussion of lectures points and terms. Discussion of written and oral student materials and researching web information techniques and examples.

References

1. BOTTA-DUKÁT Z. – BALOGH L. (eds.) (2008): The most important invasive plants in Hungary. – Institute of Ecology and Botany, Hungarian Academy of Sciences, Vácrátót, Hungary, 255 pp.
2. ELTON, C. S. (1958): The ecology of invasions by animals and plants. – The University of Chicago Press, Chicago, London, 181 pp.
3. LOWE, S. – BROWNE, M. – BOUDJELAS, S. – DEPORTER, M. (2001): 100 of the World's Worst Invasive Alien Species. A selection from the Global Invasive Species Database. IUCN-ISSG.
4. NENTWIG W (ed.) (2008): Biological invasions. Ecological Studies 193. 2nd printing softcover – Springer, Berlin, 441 pp.
5. PIMENTEL, D. (2002): Biological invasions. – CRC Press, Boca Raton, London, New York, Washington, 329. pp.
6. NENTWIG W. (ed.) (2009): Handbook of Alien Species in Europe. Springer, Berlin 399 pp.
7. ROQUES A. et al. (eds.) (2010): Alien Terrestrial Arthropods of Europe. BioRisk 4(1&2). Pensoft. 1028 pp.