

Tárgytematika / Course Description

Taxonomy of plants in anthropogenic vegetation

N_DMA09

Tárgyfelelős neve /

Teacher's name: dr. Pinke Gyula

Félév / Semester: 2021/22/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 0/0/0

Tárgy féléves óraszám /

Teaching hours(sem.): 30/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The aim of the course is (1) to present the current principles of classification and (2) to review the taxonomic positions of plants occurring in anthropogenic vegetation. Special attention is provided towards the taxonomic aspects of crops and weeds using classical-morphological, economic botanical and molecular genetic features. The origin and history of crop and weed species are also discussed on the basis of archaeobotanical records. This course also enables students to learn the main principles and potential applications of ethnobotany. The synsystematic classifications of anthropogenic vegetation in Central-Europe is also presented. Some approaches of studying the variables influencing the species composition of anthropogenic plant communities are also discussed.

TANTÁRGY TARTALMA / DESCRIPTION

1. The history of crops and weeds based on archaeobotanical records, and the co-evolution between crops and weeds.
2. Ethnobotany and the traditional knowledge of species and cultivars.
3. The system of crop varieties and the bases of economic botany.
4. The taxonomy of arable crops and their weeds.
5. The taxonomy of vegetables and their weeds.
6. The taxonomy of medicinal plants and their weeds.
7. The taxonomy of weeds in rice fields.
8. The synsystematic classifications of anthropogenic vegetation in Central-Europe.
9. Field surveys in arable land (fieldworks in different soil types).
10. Surveys in semi-natural vegetation (fieldwork in different soil types).
11. The effects of abiotic and management variables influencing the species composition in weed communities.
12. Using plant traits in studying the organisation of weed communities.

Meeting the conditions set by the supervisor.

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Borhidi A, Kevey B & Lendvay G (2012): Plant communities of Hungary. Akadémiai Kiadó, Budapest, Hungary.

Briggs D, Walters SM (2016): Plant Variation and Evolution, 4th Edition. Cambridge University Press

Gyulai F. (2001): Archaeobotanika. A kultúrnövények története a Kárpát-medencében a régészeti-növénytani vizsgálatok alapján. Jószöveg Műhely Kiadó, Budapest.

Hunyadi K., Béres I., Kazinczi G. (2011): Gyomnövények, gyombiológia, gyomirtás. Mezőgazda Kiadó, Budapest.

Pinke Gy., Pál R. (2005): Gyomnövényeink eredete, termőhelye és védelme. Alexandra Kiadó, Pécs.

Podani J. (2003): A szárazföldi növények evolúciója és rendszertana. ELTE, Eötvös Kiadó, Budapest.

Terpó A. (1986): Növényrendszertan az ökonómbotanika alapjaival. Mezőgazdasági Kiadó, Budapest.

Tuba Z., Szerdahelyi T., Engloner A., Nagy J. (2007): Botanika II. Bevezetés a növénytanba, algológiába, gombatanba és a funkcionális növényökológiába. Rendszertan. Nemzeti Tankönyvkiadó, Budapest.