Department für Neurowissenschaften

INSTITUT FÜR BIOLOGIE UND UMWELTWISSENSCHAFTEN

EINLADUNG ZUM VORTRAG

im Rahmen des gemeinsamen Kolloquiums des Instituts für Biologie und Umwelt-wissenschaften und des Departments für Neurowissenschaften

---

Prof. Dr. Gerhard Zotz

Institut für Biologie und Umweltwissenschaften
AG Funktionelle Ökologie der Pflanzen

Deconstructing the term "epiphyte"

Numerous categories are used in biology, in many cases as binary concepts. For example, we distinguish "homoiotherms" and "poikilotherms", "semelpary" and "iteropary", or "halophytes" and "glycophytes". Although useful for easy communication, such an approach may potentially obscure the gradual nature of many phenomena and create a seeming reality of things that does not exist. In my talk, after presenting a number of additional examples for such concepts, I will focus on the term "epiphyte" as a case study for the ensuing problems of using a categorical instead of a gradient approach in biology. Epiphytes are defined as non-parasitic plants that establish, grow and reproduce on a living substrate, typically a tree, being without contact with the soil throughout their entire life. While there is little doubt that an individual plant is an epiphyte the use of "epiphyte" for the characterization of an entire species is problematic: conspecifics frequently differ in their substrate use, both at a local and a regional level, and the tendency to grow as an epiphyte differs strongly and more or less continuously among species. Moreover, "epiphytes" grade into other structurally dependent forms like "climbers" or "hemiepiphytes". In the light of this, I propose a somewhat different use of the term epiphyte, and discuss the consequences of a less categorical concept of the term for future ecological and evolutionary studies.

am 10. Dez. 2024, 16 Uhr s.t., in W04 1-162

Gastgeberin: Prof. Dr. Gabriele Gerlach (AG Biodiversität und Evolution der Tiere) IBU

Gäste aller Institute sind herzlich willkommen!