Department für Neurowissenschaften

INSTITUT FÜR BIOLOGIE
UND UMWELTWISSENSCHAFTEN

Invitation to a Guest Lecture
at the joint colloquium of the Institute of Biology and Environmental Sciences and the Department of Neuroscience

Module bio890: Current topics in biology

Dr. Thorsten Krömer

Centro de Investigaciones Tropicales, Universidad Veracruzana, Mexico

Diversity Patterns of Vascular Plant Groups Along Gradients of Elevation and Disturbance in Mexico

Although land-use change and intensification are currently the most pervasive threats to tropical biodiversity, their effects on biodiversity change with elevation are mostly unknown. Here, we examine how two environmental gradients (elevation and forest-use intensity) interactively affect the diversity and composition of six different vascular plant groups (trees, shrubs, lianas, terrestrial herbs, epiphytes, and ferns) along the Cofre de Perote mountain, Veracruz, Mexico, at eight study sites between 30 to 3500 m a.s.l. The results show that alpha and beta diversity of the different plant groups does not necessarily follow the same patterns along elevational, forest-use intensity, and climatic gradients. As the highest species diversity is concentrated at the mid-elevation sites, the climatic contrast caused by the anthropogenic disturbance is more accentuated, which indicates that these are the most vulnerable ecosystems for the conservation of native species. Generally, it is necessary to preserve heterogeneous systems that comprise a mosaic of different vegetation types, including degraded forests, as an important reservoir of native plants.

04.07.2023, 4:15 pm
room: W04 1-162

Host: Prof. Dr. Gerhard Zotz (Functional Ecology of Plants), IBU

Members of all institutes are cordially invited to join the lecture.