

## Institut für Ökologie, Evolution und Diversität & RobustNature Exzellenzcluster-Initiative



## **EINLADUNG**

Kolloquium
Wintersemester 2022 / 2023

## Dr. José Macía Vicente

University of Wageningen Plant Ecology and Nature Conservation

hält am Dienstag, den **01.11.2022**, um 16:15 Uhr, im Biologicum, Maxvon-Laue-Str. 13, Campus Riedberg, Hörsaal 1 einen Vortrag über,

## "Soil-borne fungal pathogens as drivers of plant diversity and productivity"

Soil-borne pathogens presumedly drive plant diversity and coexistence in natural systems by keeping at bay plant species that become too dominant, thus enabling rarer species to thrive. This biodiversity-promoting effect is in turn thought to enhance ecosystem productivity, because plants in species-rich communities have lower risk of becoming infected than plants in species-poor communities. Despite the important ecosystem functions attributed to soil-borne fungal pathogens, the processes underlying their effects on plant diversity and performance remain poorly understood, and so do the diversity and



ecology of such fungi in natural habitats. In this presentation I will first summarize the main mechanisms that hypothetically drive the effects of soil-borne fungal pathogens on plant community dynamics, and then I will show examples from ongoing experiments tackling knowledge gaps about the role of these fungi in ecosystem functioning. Understanding how biodiverse systems control disease outbreaks and promote productivity may inform the development of more sustainable production systems.

Einladende: Prof. Dr. Meike Piepenbring