



Instituto Universitario de Investigación  
**Biocomputación y Física  
de Sistemas Complejos**  
Universidad Zaragoza

## Diana Isabel Calderón

She has a degree in Environmental Management from UTPL (Ecuador) and a Master's Degree in Environmental Management and Audits from UNIB (Puerto Rico). She is currently a researcher in training at the University of Zaragoza-EPShU, with an N4 contract attached to the PDC2022-133712-I00 project (Ministry of Science and Innovation of Spain) to investigate grass-endophyte interrelations and mechanisms of biological and genomic transfer in the holobiont.



## Researcher profile

N4 researcher focused on the study of interactions between species of *Brachypodium*, *Loliinae* and other pooid grasses with endophytic fungi of the *Epichloë* genus, using cyto-anatomical, biochemical, molecular and genomic methods to explore their coevolution and application in plant and environmental improvement, within the Bioflora group.

## Importance of her research

Grasses, one of the most important botanical families worldwide, stand out for their adaptive capacities. Among them, *Festuca*, *Lolium* and *Brachypodium* – the latter used as a functional model of monocotyledons – are relevant. These species form symbiosis with endophytic fungi, such as *Epichloë*, which provide adaptive benefits, increasing their tolerance to abiotic and biotic stresses. Studying these grass-endophyte relationships is crucial due to their role in plant communities of Iberian grasslands and their impact on agricultural and livestock activities.

