

Call for expressions of interest

4-year PhD position Balancing Competition and Facilitation in plant communities: a new perspective on Modern Coexistence Theory

Start: Early 2026; Funding: PIX2025 Predoctoral Fellowship (Spanish Ministry of Science)

We are seeking a highly motivated PhD candidate to investigate the **ecological mechanisms that govern population dynamics and species coexistence in plant communities**, with a particular emphasis on reevaluating Modern Coexistence Theory (MCT) in light of recent empirical evidence underscoring the overlooked role of facilitation. The successful candidate will join us at the Doñana Biological Station (EBD), part of the Spanish National Research Council (CSIC). EBD is a leading public research institute dedicated to Ecology, Evolution, and Biodiversity Conservation, and is recognized with the prestigious Severo Ochoa Award for Excellence.

The main objectives of the PhD are:

- a 1. To provide a conceptual update to MCT and related ecological theories by formally incorporating facilitation alongside competition across life stages.
- b 2. To generate empirically grounded insights into the processes structuring plant communities under increasing anthropogenic pressure.
- c 3. To integrate functional and phylogenetic approaches as novel tools for predicting species interaction, population dynamics and hence community responses to global change.

Candidate profile

- Master Degree (completed or near completion) in biology, ecology, biodiversity, or related fields.
- Interest in community ecology and plant-plant interactions.
- Experience (and/or strong interest) in statistical modeling and quantitative ecology.
- Basic proficiency in R programming, with willingness to further develop skills.
- Good communication skills in English.

What we offer

- A PhD contract, fully funded for 4 years, with competitive salary and social security.
- Supervision by Dr Rafael Molina Venegas and Dr Oscar Godoy.
- Opportunity to undertake short research stays in international labs, and to attend conferences and training courses.
- A stimulating working environment at EBD-CSIC, located close to the city centre of Sevilla.
- Flexibility in working hours.

Expression of interest

We are pre-screening candidates ahead of the official PIX2025 call. Please send an e-mail to rafael.molina@ebd.csic.es and oscar.godoy@ebd.csic.es, containing: motivation letter (max. 1 page) and short CV by 30 September 2025.