ENCONTRO SCIENTIA

12h00 **May 22**

Online

BASS: Biodiversity Assessment at Small Scales

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The BASS project is an ecological research initiative dedicated to understanding how local-scale environmental variations shape biodiversity and ecological interactions. Centered on the Herdade da Ribeira Abaixo (HRA), BASS integrates a series of interconnected, small-scale research efforts—mainly master's thesis projects—exploring a wide range of ecological components, from soil microorganisms to invertebrates like insects and spiders. At the heart of BASS lies a comparative approach that contrasts areas with high and low Solar Potential Radiation within the HRA landscape. These contrasting areas, characterized by differing vegetation types, provide a unique natural laboratory to study biodiversity patterns and ecosystem functioning. A network of fixed 400 m² sampling sites serves as mesocosms to examine the dynamics of local ecosystems over time. BASS is inherently interdisciplinary, fostering collaboration among researchers from CE3C who supervise and support the various student-led investigations. While the initial phase focuses on species composition, future stages aim to unravel complex ecological networks and interactions. Beyond its scientific contributions, BASS also plays a key role in education and capacity-building, offering students hands-on research experience and training. It strengthens the scientific role of HRA as a reference site for biodiversity and conservation studies and is integrated into the European Long-Term Ecosystem Research Network (eLTER), contributing essential data for long-term ecological monitoring and sustainable land-use planning. Together with Miguel Sousa, Francisco Teixeira, and Pedro Cardoso, we will present the first research projects and initial results from BASS, marking the beginning of a long-term effort to deepen our understanding of biodiversity at small spatial scales.



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