

**B4-SOLVO (Doctorate), Research fellowship at PhD level** for the exercise of functions within the scope of the “SOLVO” Research Project.

- Preferred requirements:

- Fieldwork experience and scientific production in the scope of agrochemistry, soil science and geomorphology, especially in terms of the carbon cycle;
- Experience installing and calibrating field measuring instruments for monitorization of hydrological and erosive processes (rain simulations, hydraulic measurements (flumes and V-notch), erosion plots);
- Laboratory experience and scientific production in the area of soil carbon stocks and processing of soil and/or plant samples to determine physicochemical variables (pH, EC, BD, TOC, TG-DSC, NMR, NPK, etc.);

- **Skills:**

- Experience with teamwork
- Oral and written proficiency in Portuguese and English,
- Leadership in the organization and execution of field work, laboratory and life cycle analysis data gathering;
- Training and/or experience in facilitation, conflict management and mediation
- Driving license

- **Tasks:**

- Laboratory screening to maximize the restoration capacity of mulch+biochar (M-B) on soil ecosystem services (ES)
- To assess the effects of selected mulches on soil-mediated ESs in degraded olive orchards across spatial scales;
- Field assessment and sample processing for the assessment of the soil carbon stocks, carbon balance and carbon forms through sediment and soil sampling of each treatment;
- Field sampling and sample processing for the assessment of soil fertility (through CEC, N, P, K and C-NMR molecular analysis) and soil habitat status (enzymatic activity, microbial DNA, eco-toxicological assays);
- Hydrological-erosive modeling within broad temporal and spatial scenarios useful as decision-support tools for land managers.
- To assess the treatments' life-cycle performance and the environmental suitability (LCA); based on the assessment of the mitigation of the water scarcity footprint and the carbon footprint.
- Organization and processing of field, laboratory and stakeholders survey databases;
- Strengthen existing links and create new links between the various territorial agents through the facilitation of events, bilateral and multilateral meetings;

- **Literary Qualification: Doctorate**

- **Qualification Description:** PhD in the following areas: Environmental and Marine Sciences, Environmental Engineering, Biochemistry, Agricultural Chemistry, Forestry, Sustainable Management of Natural Resources, Geography or Sociology, Sustainability, Governance.