**PhD OFFERED**

**Title:** Deciphering biodiversity and soil-plant feedbacks in the truffle environment for fitting best management practices to optimise the productions of truffle systems.

**Description**

The thesis is part of the TUBERLINKS project, which aims to study the ecological interactions in the soil of truffle growing areas, and their links with the physiology of the host tree, in order to optimise knowledge-based strategies for the sustainable management of truffle plantations. The thesis will focus on the study of i) soil biodiversity and functionality in truffle producing areas, ii) the physiological response of the tree to truffle colonisation and environmental conditions, and iii) the impact of the introduction of other crops as complementary management to truffle cultivation in the field. The thesis work will therefore involve basic and applied research, and will use various methodologies, from sampling of soil, truffles and other organisms, to molecular and plant physiology techniques, in greenhouse and field trials.

**Requirements:**

A Graduate in Biology, Biotechnology, Forestry or Agronomy Engineer, who fulfils the requirements to enrol aPhD program at one of the Universities of Madrid (Spain). We are looking for a person with a strong motivation on research in microbial ecology and ecophysiology, with good theoretical and practical learning skills, good English level, able to think independently and to work in group. The research will be developed at the Institute of Agronomic Sciences ICA-CSIC (Madrid) and part of the work will be carried out in Centro de Investigación y Tecnología Agroalimentaria de Aragón CITA (Zaragoza), and University of Lleida-UdL (Lleida). Previous research experience will be considered as an asset.

**Contact:**

The candidate should apply for a PhD 3+1-yr contract within the Spanish programme FPI (Formación de Personal Investigador. Ministerio de Ciencia Innovación y Universidades, Spain:[http://www.ciencia.gob.es/portal/site/MICINN/](https://urldefense.com/v3/__http%3A/www.ciencia.gob.es/portal/site/MICINN/__;!!D9dNQwwGXtA!SWl4mqugWWkSrzT6ZwhswUk5r2I7KT-q-NFImqFINGzawBl2mRFM7IUYEb02Xel9-SBgZXux_1qvn3AmhOdr$)). The salary will be approximately 1,700 € gross per month. Doctoral fees will be covered.

The candidate will be selected according to the criteria described in "Convocatoria de Proyectos Generación de Conocimiento 2022" ([https://www.aei.gob.es/](https://urldefense.com/v3/__https%3A/www.aei.gob.es/__;!!D9dNQwwGXtA!SWl4mqugWWkSrzT6ZwhswUk5r2I7KT-q-NFImqFINGzawBl2mRFM7IUYEb02Xel9-SBgZXux_1qvnx6sYjiY$)), and is expected to join in autumn 2023.

If interested, please contact by sending an e-mail, including your CV academic degree and marks, to Ana M. Rincón (ana.rincon@csic.es), José J. Peguero (jjpeguero@cita-aragon.es), o José A. Bonet (jantonio.bonet@udl.cat).