

## ***IRTA IS SEEKING A PhD STUDENT GRANTED BY THE SPANISH RESEARCH AGENCY (AEI)***

IRTA is interested in contracting a PhD student for its Centre of Fruitcentre (Lleida) in the Sustainable Field Crops Programme, which is going to be granted by the Spanish Research Agency under the FPI program.

### ***Title of the project in which the PhD student will be involved***

**“Effect of different agricultural practices on the dynamics of calcium uptake and allocation in peach trees (<sup>44</sup>CaPEACH)”**

### ***Concept and approach of the project***

The main hypothesis of this project is that agricultural practices to manage soil water available and transpiration can increase Ca concentration in peach and, consequently, improve the fruit quality, storability of fruit, and resistance to abiotic and biotic stress. Besides, foliar Ca sprays can be an efficient method to increase Ca concentration in fruit when there are limitations to uptake or allocate Ca to fruit. However, the effectiveness of foliar nutrition is affected by endogenous factors related to fruit anatomical structure and tissue permeability.

### ***General objectives of the project.***

The General Objective is to study the dynamics of Ca absorption and allocation to aboveground parts in peach trees and the factors that influence them, using the stable isotope <sup>44</sup>Ca as tracer. The ultimate purpose of this multidisciplinary project is to provide **scientific knowledge** and **useful tools** to help the development an integrated fertilization management aimed at improving the Ca content in the fruit.

### ***Duration***

The duration of the PhD student contract will be for four (4) years.

### ***Remuneration***

- 17,785.00 € gross/year during the first two years
- 18,182.22 € gross/year during the third year
- 22,727.74 € gross/year during the fourth year

The salary will be subject to the corresponding withholdings, pursuant to prevailing regulations, and to the collective employment agreement of IRTA.

IRTA will also pay the fees of the doctoral school when receiving the enrolment.

***Requirements:***

Candidate profile:

Degree in Agricultural Engineering, Biology, Chemistry, or similar.

Master in Agronomy, Plant Nutrition or similar.

Any prior experience in research or laboratory will be viewed positively.

Other requirements: High English level. Concepts of statistics

Interested candidates should submit a letter of interest, 2 references, and CV (including the academic record) to Dr Josep Rufat ([josep.rufat@irta.cat](mailto:josep.rufat@irta.cat)). **Deadline: October 15, 2020\***.

\* This date is indicative and will depend on the opening of the call, expected during the month of September according to the AEI.