



Instituto Universitario de Investigación
**Biocomputación y Física
de Sistemas Complejos**
Universidad Zaragoza

Ana Alonso Simón

She completed her PhD thesis at the University of León, with stays at the University of Kyoto, and she did a postdoc at Copenhagen, on the use of plant cell walls for bioethanol. Since 2015, she did research for the Vine and Wine Research Institute of the University of León and other companies, aiming to obtain virus-free plants of grapevine and hops. In 2021, she studied the allelopathic impact of *Carpobrotus* sp. and in 2022, she joined as Assistant Professor Doctor, joining BIFI in 2023.



Researcher profile

Currently, she is an R3 researcher. She joined the research area of genetic regulation, physiology and biotechnological applications of cyanobacteria. She investigates the influence of cyanobacteria on the growth of plants subjected to abiotic stresses caused by pesticides (lindane) or heavy metals (copper). Cyanobacteria are beneficial to plants under abiotic stress conditions, but whether this is due to the sequestration of stressors, their degradation or the synthesis of beneficial compounds such as phytohormones is still under investigation.

Importance of her research

Plants are essential for food and other resources. However, their performance can be affected by stress factors, many of them human-induced, such as the increase of metals in the soil due to the use of fungicides. In this sense, the rhizosphere plays a key role in plant resistance, and cyanobacteria, present in the soil, can influence their development. Understanding their impact is essential to improve crop development.

