

GROUP NAME: FRUITICULTURE. GENETIC CHARACTERIZATION, ADAPTATION, AND IMPROVEMENT (INAFRUT)

CODE: AI2_23R



Our research group's general aim is to contribute to the development of sustainable fruticulture in the face of current production challenges. We propose innovative materials and technologies, and we provide information to aid in increasing the competitiveness and sustainability of the fruit production sector in general, and, specifically, in Aragon.

Our activities are based on our knowledge of plant material and its great variability, thus equipping us with the necessary know-how to deal with eventual shortages in the future. The ultimate goal is to obtain quality fruit products that ensure farm profitability, while enabling farmers to compete sustainably and efficiently in current markets.

LINES OF RESEARCH

- Characterization and preservation of genetic resources: based on our study of genetic diversity and characteristics of interest, we develop new genetic material that introduces improvements and responds to the sector's needs.
- Genetic improvement of fruit varieties and rootstocks in programs based on genetic characteristics of interest, as well as on our study of the interaction between genetic management and environmental/crop conditions.
- Production optimization by gaining knowledge of the physiological processes involved in plant behavior. Reproductive biology, winter dormancy, pollination needs and agro-climatic requirements; responses to biotic and abiotic stresses and the obtention and preservation of healthy fruit material.

NOTABLE PROJECTS

- "Valorizing some pome and stone fruit germplasm variability to ensure resilience to climate change in the Mediterranean area" – MEDPOME-STONE PRIMA S2 (2022-2025).
- Crop Wild Relatives for a sustainable fruit production in Europe. 2022 HORIZONTE EUROPA
- Multidisciplinary approach for exploiting genetic diversity to increase value of autochthonous Apple. APPLIEDIV. AEI (2023–2027)
- Genomic Approaches for a holistic Selection of important traits in Almond Rootstocks and Scion Breeding. HOLA4ALLTREE. AEI (2023-2027)
- Genetic improvement of cherry trees. Reproduction, phenology, maturation, and fruit quality. CHEERY_BREED. AEI (2023-2027)
- Impact of climate change on the transition from ecodormancy to endodormancy in fruit trees. A comparative study in two climates: temperate and subtropical. 2023 FUND BIODIVERSIDAD-Adaptación Cambio Climático

MEMBERS

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