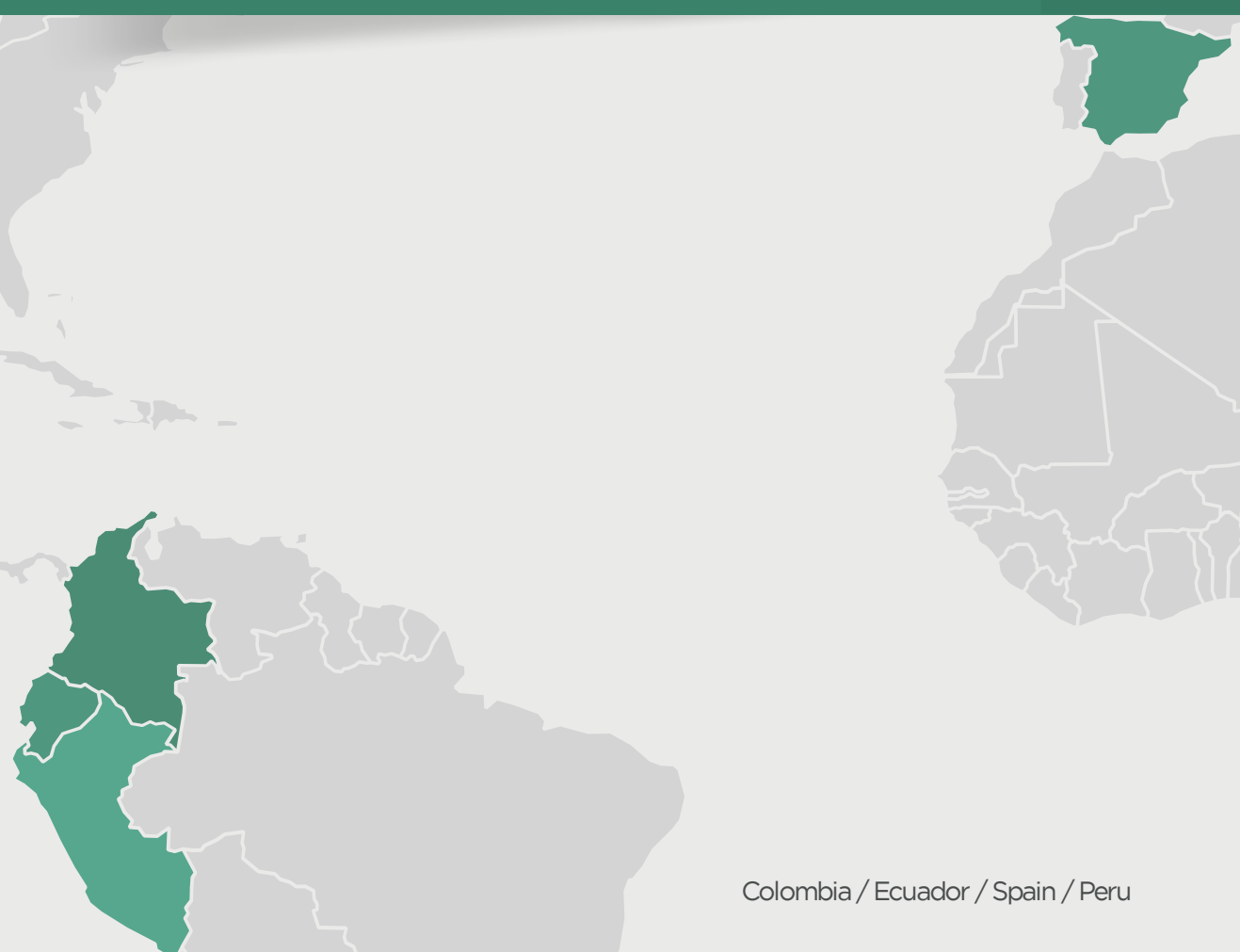


Competitiveness and productivity: master keys to development and innovation in the Andean fruitculture

The project develops technologies for adaptation to climate change and increasing the quality of avocado, passiflora, citrus fruits, and their derivatives, which are being disseminated and transferred in Colombia, Ecuador and Peru.



Colombia / Ecuador / Spain / Peru



4 Validated fertigation technologies



3660 Participants in dissemination events



32 Value added formulations



90 Articles, presentations, theses and technical papers

Main donors



Three conditions for competitiveness: educated and informed fruit grower, research and quality.

The implemented initiative

The moderation in the use of agrochemicals, the integrated management of soil fertility, better water management, carbon sequestration, the addition of value to fruits and their residues on circular economy

approach, are topics in which the project “Andean Fruit Productivity and Competitiveness” is contributing to the sustainable growth of fruitculture in the region.

Agricultural, processing, storage and packaging environmentally-friendly technologies.

The technological solution

The Hass avocado (HA) and granadilla (G) seedlings and plants provided optimal fruit under fertigation, with early fruiting and higher productivity compared to control crops. Also for AH and G, 2 consortia of microorganisms increased the absorption of nutrients in vigorous and healthy plants. The adjustment of periods of lack of pesticides in HA reduced rejections in commercialization. Three promising passion fruit materials were validated. In postharvest, shelf lives of fresh fruit were determined and that of avocado was

prolonged with modified atmospheres. The shelf life of frozen HA pulp was measured. In transformation, after market analysis, numerous products derived from fruit or their residues were designed, some of them with scaling studies, production costs and environmental impact, and others reached the market. In addition, circular economy schemes such as fruit waste biorefineries were proposed. The abovementioned has been transferred to actors of the fruit chains, and divulged to academics and society.

Andean fruit productivity and competitiveness project at a glance



MÁS INFO



Results

4 fertigation technologies that have allowed reaching 15 tons / ha-year in granadilla (G) (mean Ecuador, 10), 16.8 in Hass avocado (HA) (vs. 8.5 fert.-edaphic). 2 soil-plant-water climate databases. 3 sustainable agr.practices, 6 studies of shelf life, 2 of processed fruit; 2 shelf life lengthening methods for G and HA and 3 new passion fruit materials. 1 study of fresh / processed fruit markets. Lab prototypes, 19 foods, 3 cosmetics and 4 materials. Piloted prototypes, 3; products in the market, 3, 2

carbon footprint of HA / gulupa, with software design for its calculation. 3 biorefineries were evaluated, 24 articles were written (19 published and 5 submitted), 22 papers, 9 posters, 9 book chapters, 24 theses and 1 book. Events: 2 fairs, 3 symposia, 20 conferences, 3 webinars, field days 22, 1 diplomat for 3660 participants (1587 women). Virtual prdts: 65 ecards and infographics, 47 videos and 1 webstory, with 57150 views

Participating Organizations

