

Trops, the largest avocado producer in Spain, has teamed up with digital agriculture company AgriSmart Data in a project that it claims has reduced the amount of water trees need by half.

The company says that by using precision agriculture technology, it has managed to produce Hass avocados with less than 350 liters (92 gallons) of water per kilogram (2.2 pounds) of fruit produced. It says that this contrasts to the usual 600-700 liters (159-185 gallons) normally required.

This kind of irrigation management is "an example of the advantages of the use of new technologies in the cultivation of subtropical crops and agriculture in general, as it allows the most effective and efficient management of water, a scarce and key resource for the development of society," Trops explained in a statement.

This has been achieved thanks to the development and use of monitoring and control technologies for irrigation management and planning, carried out during more than three years of trials conducted by Trops' technical department and AgriSmart data.

The capacity of the iTelemeter equipment to take control of irrigation automatically, the development of the algorithms that govern it, together with the constant monitoring of tree growth and the microclimate of the farm, have made it possible "to carry out very efficient irrigation, minimizing tree stress situations so as to obtain the maximum possible productivity with the allocation of available water resources", AgriSmart said.

Trops and AgriSmart are making the technology available to Trops' 3,000 member growers throughout southern Spain following the successful trial.