Service ID S00266

Location Spain

Evaluation of sprayers for tree crops for site-specific applications

Provider service

University of Cordoba (UCO)

Link to content

https://agrifoodtef.eu/catalogue-of-services/evaluation-sprayers-tree-crops-site-specific-applications

Type of Sector

Tree Crops

Accepted type of products

Physical system

Type of service

Certification, Collection of test data, Data analysis, Desk assessment, Market research, Performance evaluation, Test design,

Description

This service assesses the efficiency of sprayer systems designed for tree crops, focusing on site-specific applications of phytosanitary treatments. By integrating sensors such as 3D cameras and canopy maps, the service evaluates canopy volume detection and distribution accuracy. Field testing includes drone flights and hardware implementation to monitor sprayer performance. This service is ideal for precision agriculture applications in tree crops, providing insights into equipment effectiveness for sustainable and targeted treatment distribution.

How can the service help you

This service supports agricultural professionals and equipment manufacturers by validating sprayer effectiveness in targeting specific areas within tree crops. Through accurate canopy mapping and sensor integration, the service enhances the precision of phytosanitary applications, ensuring optimal product usage and minimising environmental impact.

How the service will be delivered

Customisation options include choosing specific sensors or monitoring tools and adjusting parameters based on crop requirements. Any regional or regulatory guidelines for phytosanitary application are addressed with the client.

Service customisation

The service is conducted in Spain, involving on-site field tests with drones, 3D cameras, and monitoring hardware. Deliverables include performance evaluations, sensor accuracy reports, and recommendations for sprayer optimization. Clients should provide sprayer equipment and specify target parameters for site-specific applications.