

Service ID S00275

Location Spain



Evaluation of sprayer boom for spot spraying site-specific applications

Provider service

University of Cordoba

Link to content

<https://agrifoodtef.eu/services/evaluation-sprayer-boom-spot-spraying-site-specific-applications>

Type of Sector

Arable farming, Greenhouse, Horticulture, Tree Crops, Viticulture

Accepted type of products

Physical system

Type of service

Certification, Collection of test data, Data analysis, Desk assessment, Market research, People training, Test design, Test execution

Description

This service evaluates the efficiency of sprayer booms equipped with sensors that use artificial vision to detect weeds and enable site-specific phytosanitary applications. Through field tests and drone-assisted monitoring, the service examines how accurately the sprayer boom applies treatments, identifying false positives (detecting weeds where none exist) and false negatives (failing to detect actual weeds). The service is essential for improving precision agriculture practices in arable and horticultural crops, as well as in tree crops and viticulture.

How can the service help you

By ensuring accurate weed detection and application efficiency, this service helps agricultural professionals optimise phytosanitary use, reducing costs and environmental impact. It supports clients in refining their equipment's precision by contrasting their results, analysing errors, and improving the equipment's performance, contributing to sustainable crop management practices.

How the service will be delivered

Customisation includes options for specific weed detection metrics, site conditions, and sensor configurations. Additional support can be provided for market research insights on sprayer technologies.

Service customisation

Conducted on-site in Spain, the service involves the use of sensors, drone monitoring, and performance evaluation hardware. Deliverables include detailed performance reports, data analyses, and certification documentation. Clients should provide access to sprayer equipment and specify application parameters.