

Service ID S00316

Location Spain



Testing or verification of the soil sample size needed for irrigation model

Provider service

University of Cordoba (UCO)

Link to content

<https://agrifoodtef.eu/catalogue-of-services/testing-or-verification-soil-sample-size-needed-irrigation-model>

Type of Sector

Arable farming, Horticulture, Tree Crops

Accepted type of products

Data, Physical system, Software or AI model

Type of service

Collection of test data, Data analysis, Performance evaluation, Test design, Test execution, Test setup

Description

This service involves the testing or verification of the soil sample size needed for the recalibration of the model in intelligent irrigation systems. It includes physicochemical parameters of the soil, and variable distribution of water and supplies. Observations are systematic and cover different conditions and crops to verify model accuracy and the effectiveness of site-specific input distribution.

How can the service help you

The validation of the service, developed by the customer, addresses the critical needs for optimised water distribution and improved agricultural efficiency. Before using this service, companies may struggle with inconsistent irrigation models, leading to either over- or under-irrigation, which can negatively impact crop health and yield. By testing soil sample size, the service ensures that water and inputs are distributed accurately based on real-time conditions and soil properties. After implementing the service, companies benefit from an improved system accuracy, and enhanced productivity through tailored water and nutrient application across different crops and conditions.

How the service will be delivered

The service will be customised according to customer needs (model, pivot, crop, season...).

Service customisation

The service takes place at the Rabanales Experimental Farm facilities in Rabanales and is tailored to align with the crop cycle under evaluation. Field sampling and irrigation are essential to assess efficiency, so the crop must be one of those cultivated in the plots where the irrigation system being tested is installed. The customer is responsible for providing the mathematical irrigation model. Upon completion, a detailed final report outlining the service results will be delivered to the customer.