**Service ID** S00339

**Location** Spain

# Validation of an intelligent microscope for automated honey quality analy

## Provider service

University of Cordoba (UCO)

## Link to content

https://agrifoodtef.eu/catalogue-of-services/validation-intelligent-microscope-automated-honey-quality-analysis-through-0

## Type of Sector

Food processing

## Accepted type of products

Data, Physical system, Software or AI model

## Type of service

AI model training, Collection of test data, Data analysis, People training, Performance evaluation, Test execution, Test setup

## Description

The validation of the service will be carried out using corbicular pollen samples, which will be examined through the established traditional unitary methodology and with an AI-equipped microscope. The results will be statistically compared to determine the error rate of the AI in the analysis.

## How can the service help you

Validation through traditional analysis of honey samples allows the company to improve and determine the condition of the equipment, providing useful information to assess the state of the product.

## How the service will be delivered

The service can be customized to meet specific customer needs, adapting the number of samples evaluated and the origin based on the requirements of each company, being able to provide samples from the university collection.

## Service customisation

Chemical analyses, corbicular pollen analysis, and crystallisation degree will be conducted in the laboratory using both methodologies, with each sample evaluated on the same day according to its respective method. Corbicular pollen refers to the pollen collected by bees in their corbiculae (pollen baskets), which serves as a primary protein source in the hive. The crystallisation degree of the samples is crucial for assessing the honey's texture and quality. Pre-collected samples will be used, and once the analysis results are obtained, they will be compared to establish the error levels present in each method.