

**Service ID** S00322

**Location** Spain



## **Experimentation with Artificial Intelligence for Agricultural Optimisation**

### **Provider service**

HISPATEC

### **Link to content**

<https://agrifoodtef.eu/services/experimentation-artificial-intelligence-agricultural-optimisation>

### **Type of Sector**

Arable farming, Greenhouse, Horticulture, Tree Crops, Viticulture

### **Accepted type of products**

Data

### **Type of service**

AI model training, Data analysis, Test execution

### **Description**

This service applies artificial intelligence (AI) algorithms to process and analyse large datasets collected from agricultural operations. By leveraging machine learning and data analytics, the service generates predictive insights about crop needs, such as water, fertilizer, and pest control, allowing for more accurate and efficient resource use. The AI-driven approach helps farmers and agribusinesses optimise their production processes, reduce waste, and improve yields by making data-driven decisions.

## **How can the service help you**

This experimental service helps agribusinesses enhance their decision-making by providing accurate predictions and recommendations based on historical and real-time data. By optimising the use of resources such as water, fertilisers, and energy, this service can improve crop yields, reduce costs, and increase sustainability. AI-powered insights help clients stay ahead of potential challenges like climate variability or pest outbreaks.

## **How the service will be delivered**

The AI models can be customised based on the client's specific crops, climate conditions, and farming practices. Custom data inputs, such as soil type, local weather patterns, and historical crop performance, can be integrated to fine-tune the predictions and recommendations. The service can also be adapted to different scales of operation, from small farms to large agribusinesses.

## **Service customisation**

The service is delivered remotely through cloud-based AI platforms that analyse data collected from sensors, weather stations, and other data sources. The AI algorithms process the data and provide actionable insights, including predictions on crop health, resource needs, and optimal planting schedules. Clients will receive reports and dashboards with recommendations for optimizing resource usage, improving yield, and reducing environmental impact.