

A red agricultural trailer is parked in a field of tobacco plants. The trailer has three large doors and yellow and red diagonal stripes on the lower part of the doors. The tobacco plants are green and leafy, growing in rows. The background shows a clear blue sky and some trees.

# TOBACCO DSS

The DSS for tobacco cultivation

# Why choose TOBACCODSS



## **Increase**

the quality and quantity  
of cultivated tobacco



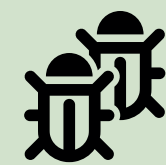
## **Monitor**

the state of the fields,  
even remotely



## **Reduce**

management costs



## **Defend**

in advance from pests and  
diseases



## **Optimize**

the use of inputs (water,  
treatments, fertilizers)



## FIELD MAPPING

Geolocate the field on the map and draw it: features will be immediately hooked. You can enable the cadastral map and enter sheet and parcel information.

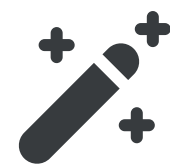
Use one of the following methods to create your field.



### Draw on map

Locate the plot on the map and draw it manually.

✓ Select



### Automatic detection

Locate the plot on the map and enable automatic detection to map the field with just one click.

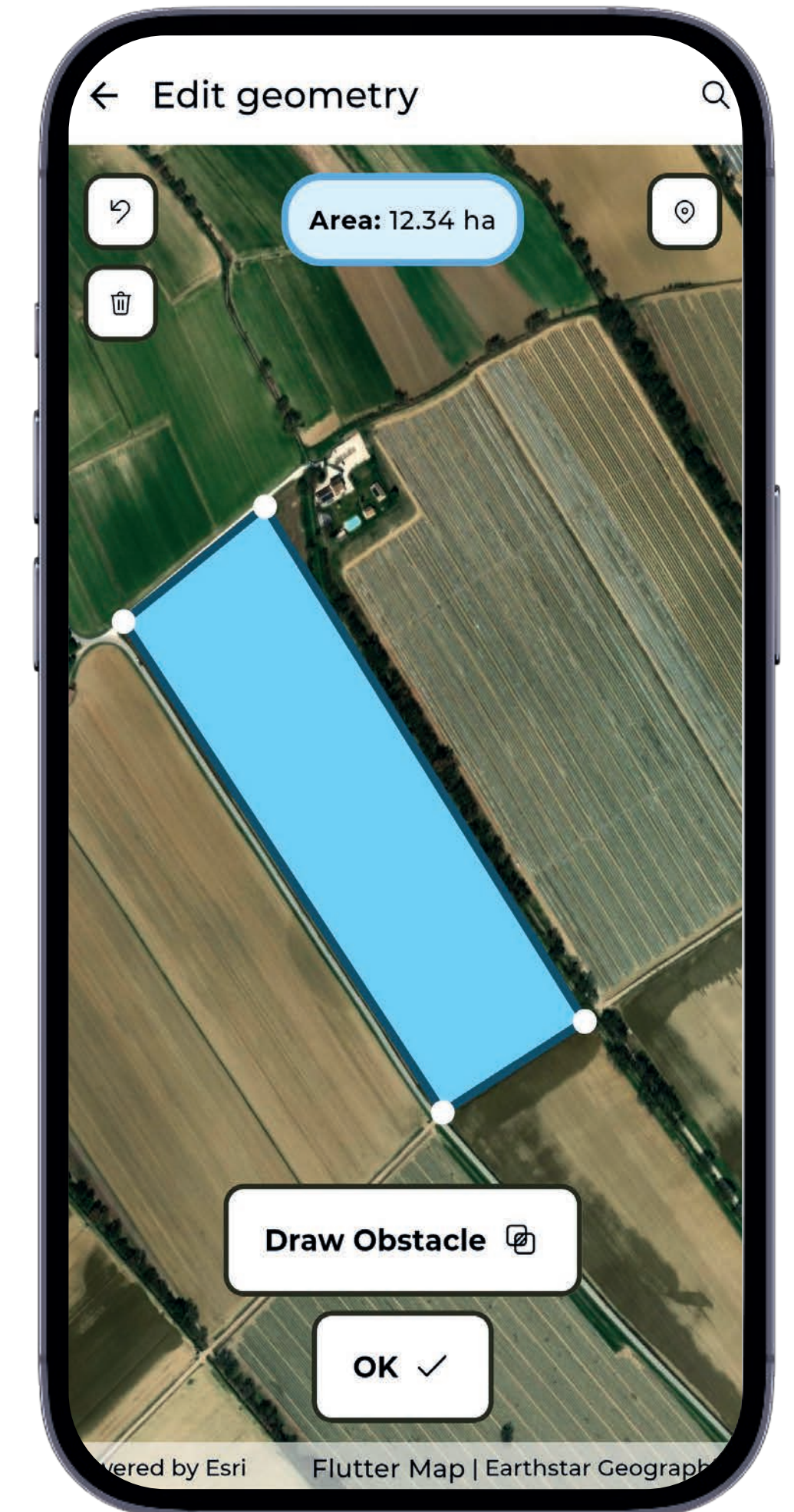
✓ Select



### Upload files

Upload a .shp or .kmz file..

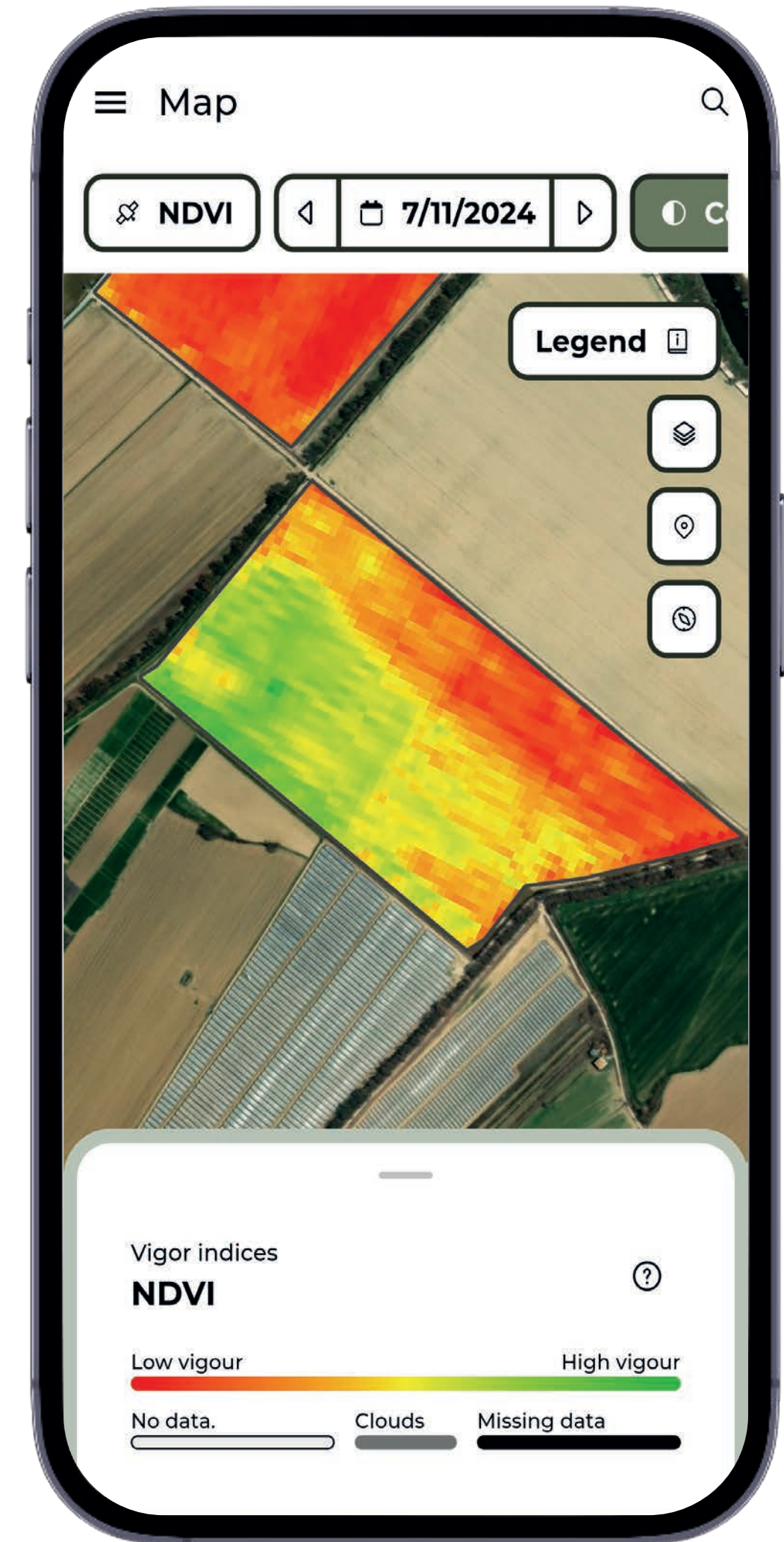
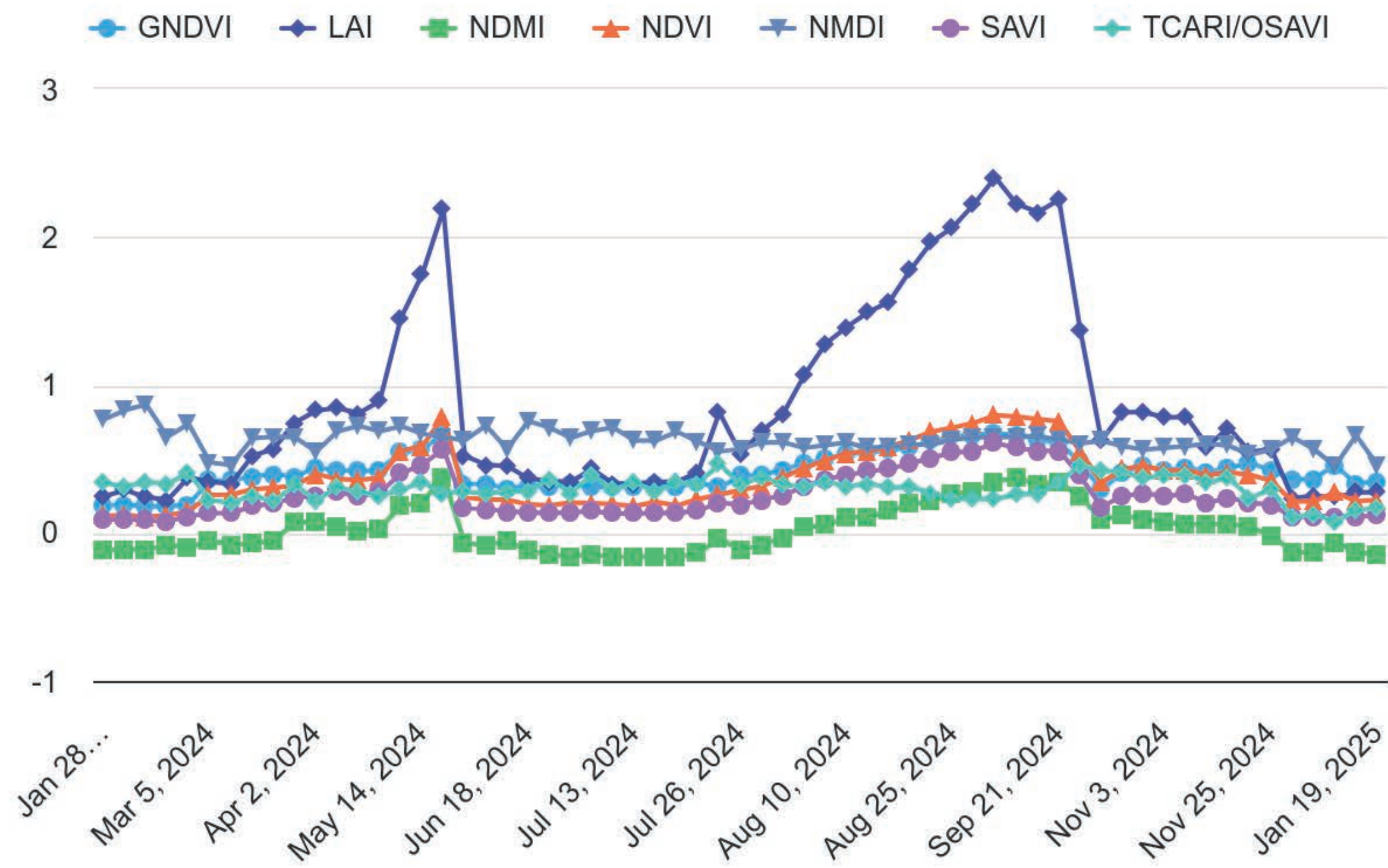
✓ Select





## SATELLITE IMAGERY

Consult Sentinel-2 satellite images with vigor, water stress and chlorophyll indices to assess crop health and plan monitoring activities.



# Features



## WORK



### TASK MANAGEMENT

Create and assign to your collaborators the activities to be carried out in the farm **in real time**.



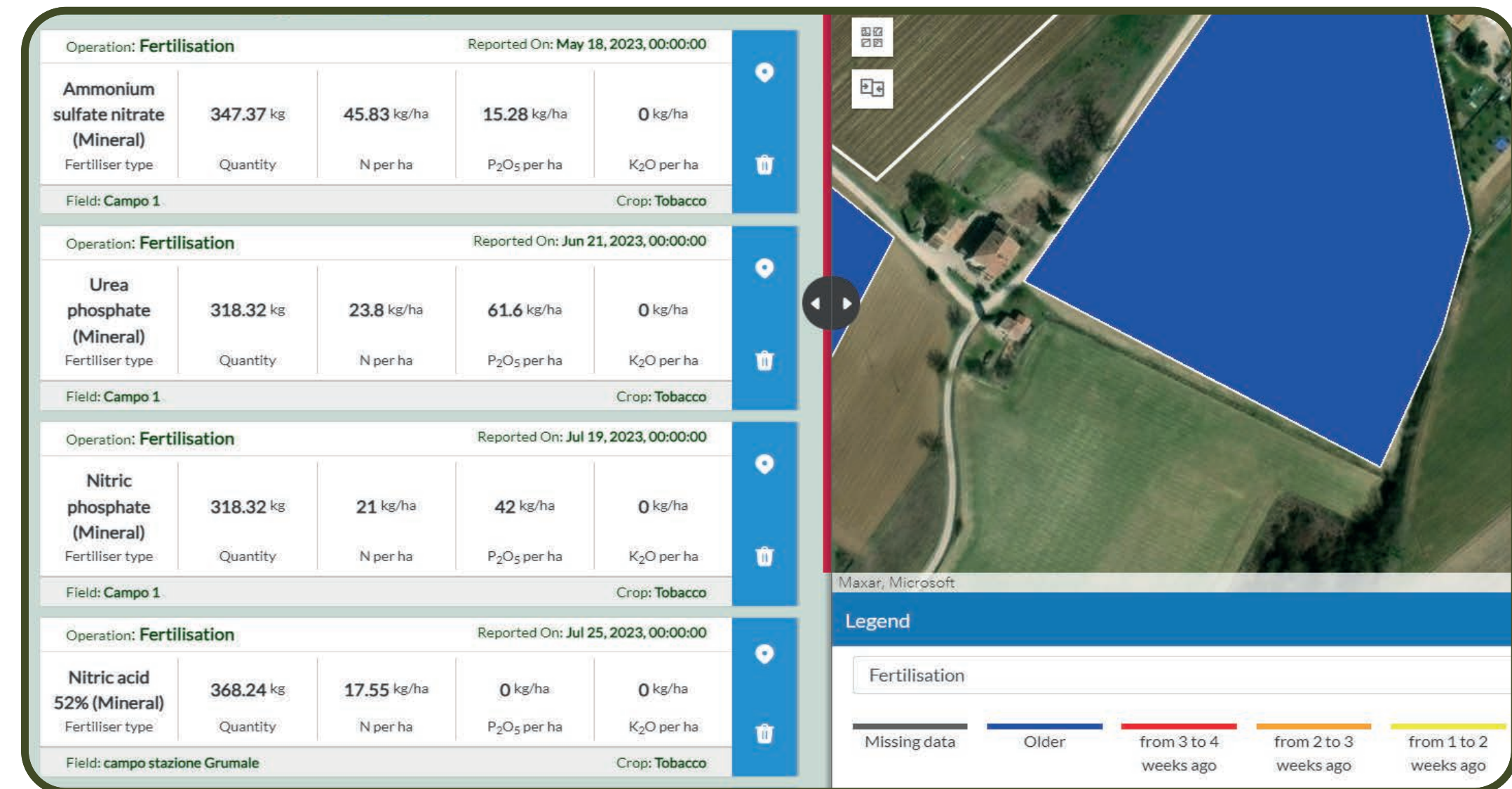
### MACHINERY

Register your agricultural machinery, any problems and maintenance carried out. You can also connect them to Agricolus by using **Agrirouter**.



### CROP OPERATIONS

Register where, how and when crop operations such as irrigation, treatments and fertilization have been carried out.



Lot code: J12756

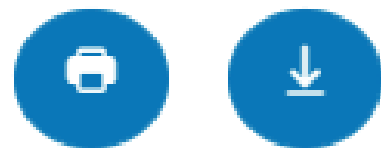


Landing page

<https://web.agricolus.com>



[Visit page](#)



The QR code on the mask will allow easy access to the web page dedicated to the product traceability. In this way, all detailed product information can be consulted with great convenience









## PRODUCTION LOTS


Create and assign to each crop its own production lot to improve **traceability** of operations. A **QR code** is also generated that allows you to access and share the dedicated web page where you can consult all the information on the product.



## SUSTAINABILITY

Monitor the **economic** (yield, production) and **environmental** (water consumption, input control and farm biodiversity) **sustainability indicators** of your farm. You can set the level to be reached for each indicator and monitor how the work is going.

-  Economic 
-  Environmental 
-  Targets List 

 ENVIRONMENTAL INDICATORS ENVIRONMENTAL ?

Environmental indicators focus on the impact of agricultural practices on the surrounding environment

Water	
Indicator	Value
Total water consumption	5980.21 m <sup>3</sup>
Average water consumption	163.1 m <sup>3</sup> /ha

Fertilizer

# Features

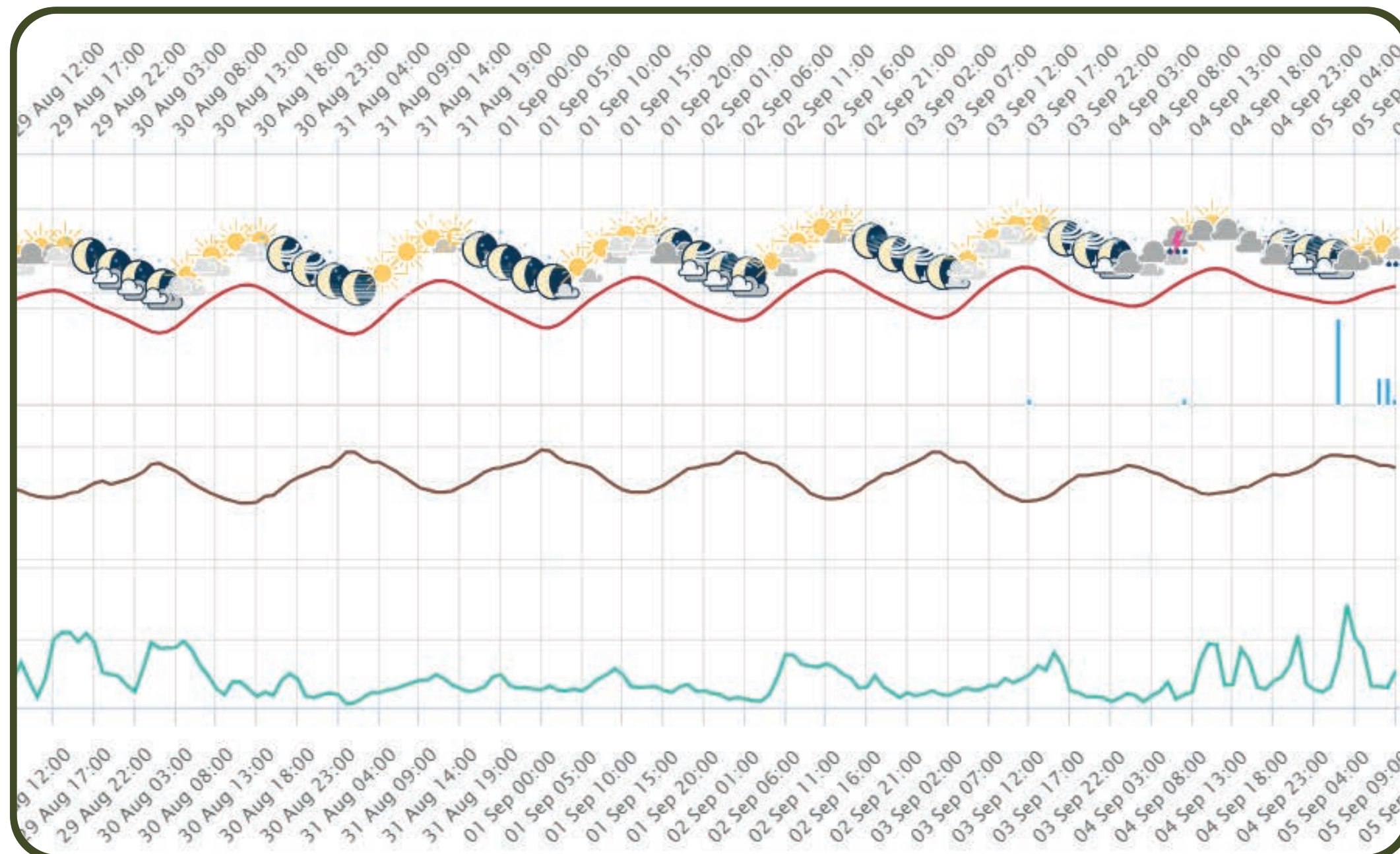


## WEATHER



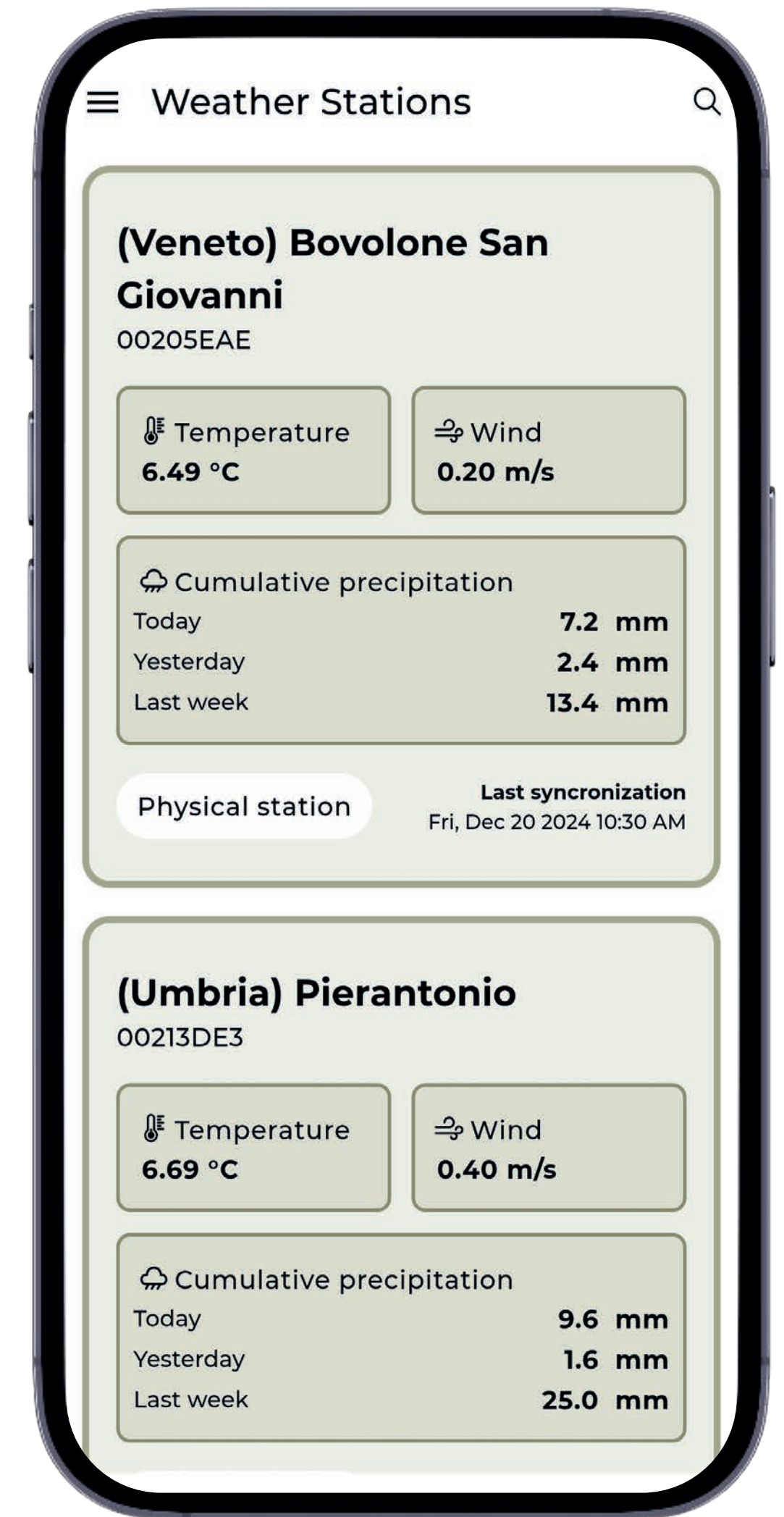
## WEATHER FORECASTS

Consult professional weather forecasts up to 7 days updated every hour: **temperature, humidity, wind speed, rainfall.**



## WEATHER STATIONS

**Virtual weather station included;**  
\*physical weather stations and sensors can be purchased or integrated, if already present in the company.





# Features



## FORECAST MODELS



## PHENOLOGY

Prediction of phenology to assess field needs in each development stage.



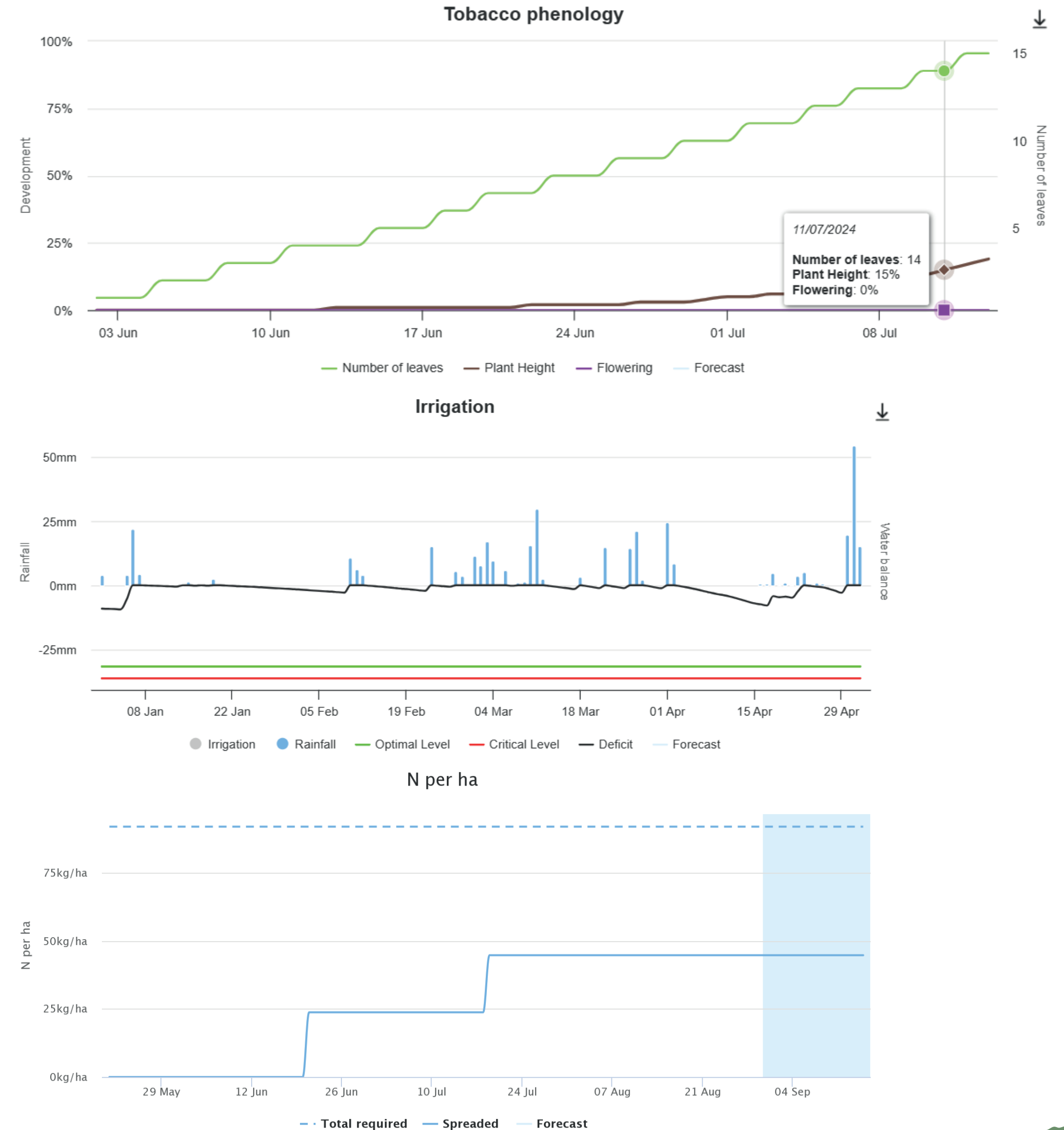
## IRRIGATION

Evaluation of water requirements to carry out irrigation when necessary with the right amount of water.



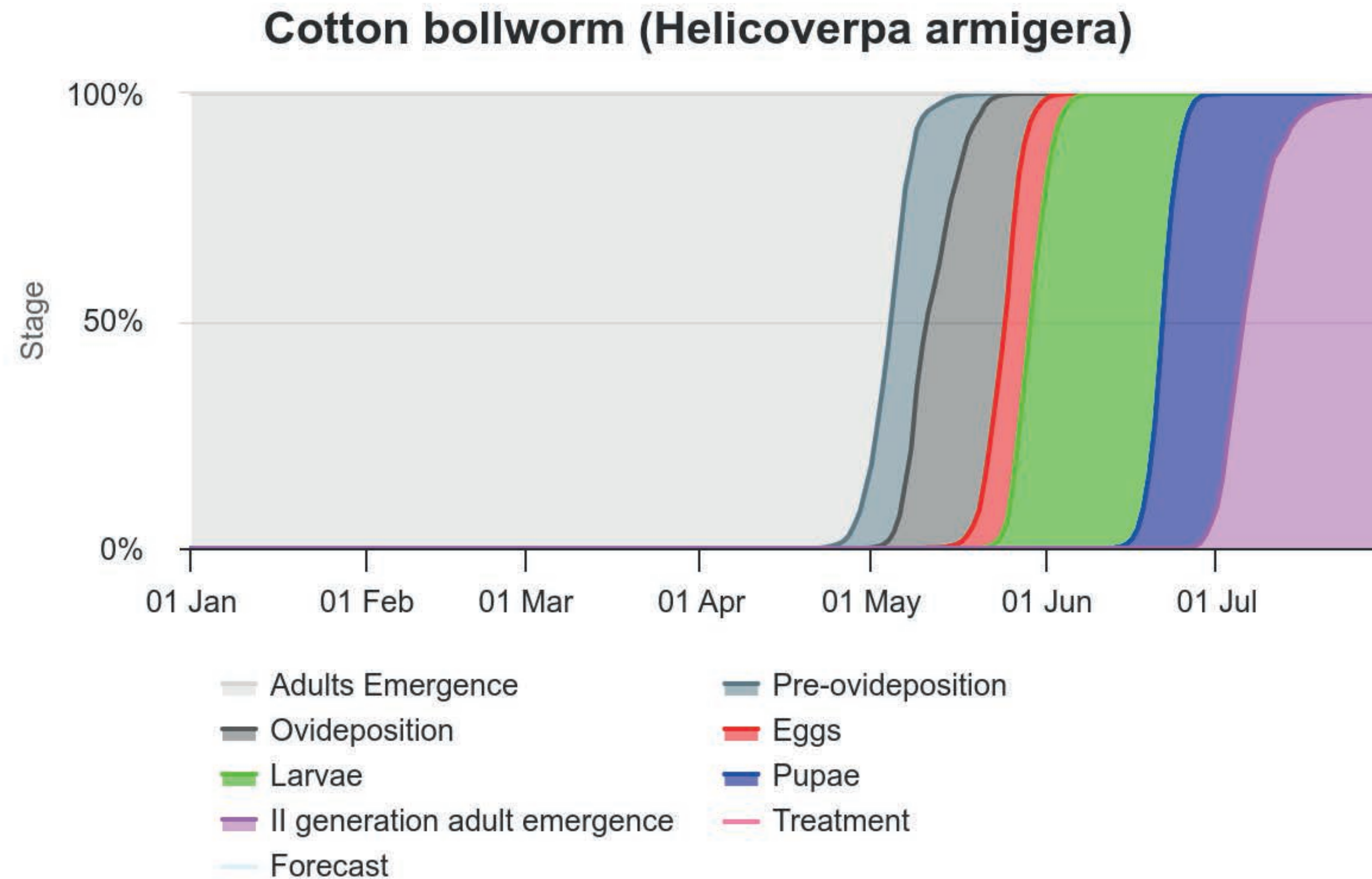
## FERTILIZATION

Calculation of the total requirement of nitrogen, phosphorus and potassium (Kg/ha) required throughout the production cycle.





## PESTS AND DISEASES MODEL



Prediction of infestations and diseases to assess the risk of pest (***Helicoverpa armigera***) and diseases (***Peronospora***) and act promptly.



## DECISION SUPPORT

Provides information on the interventions to be carried out on the basis of the data collected.



TOBACCO DEFENSE  
MODEL ALERTS

PEST PREDICTION  
PLANT DISEASES AND  
INSECTS

Check for the presence of adults  
*Helicoverpa armigera*

No risk  
*Peronospora*



forecast for the next 12 hours



12 HOUR  
WEATHER FORECAST



33.55mm

water requirement

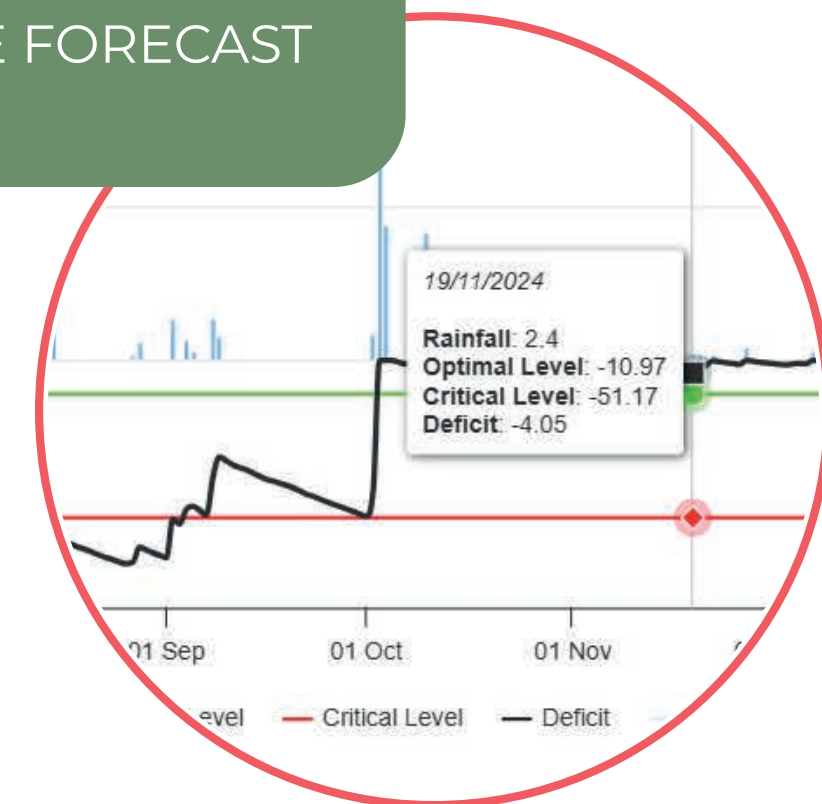
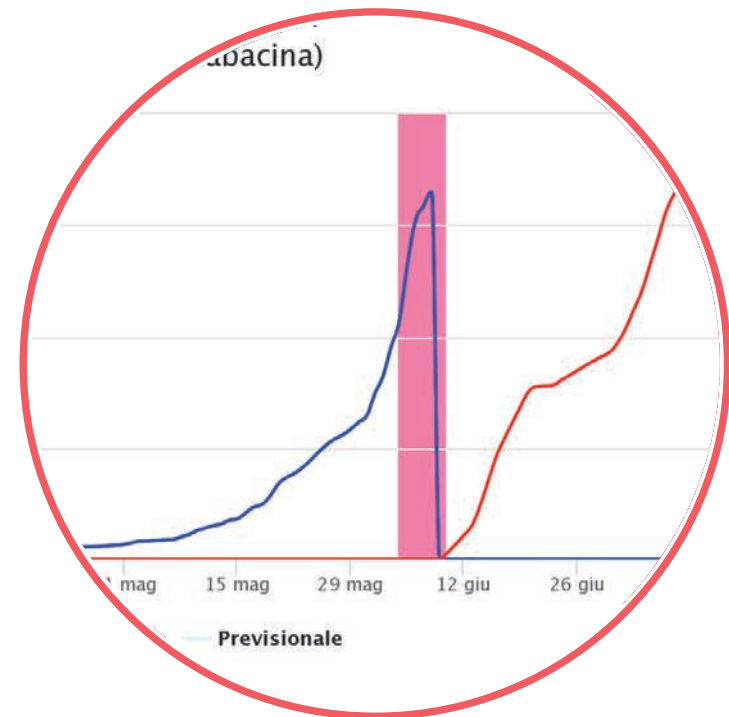


ESTIMATION OF IRRIGATION  
NEEDS FROM THE FORECAST  
MODEL

90% flowering (BBCH 0)



FIELD SURVEYS ENTERED BY THE USER  
AND INTEGRATED INTO THE PHENOLOGY  
FORECASTING MODEL



RISK LEVEL LEGEND

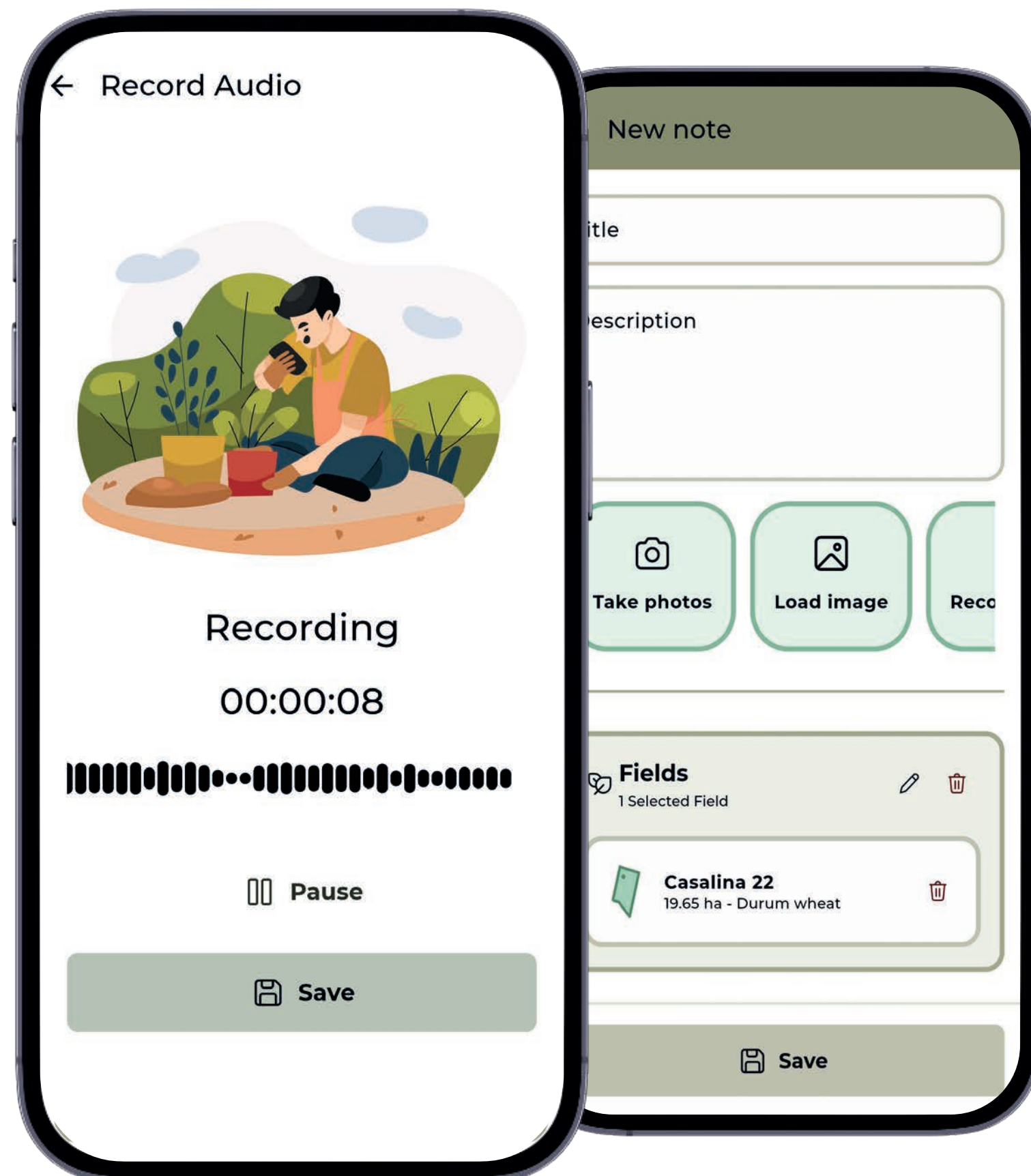


High risk  
Alarm level



## CROP SCOUTING

Geolocate and register into the platform the field activities with **Agricolus's App**: phenology, pests and diseases, traps and captures, crop damage, soil analysis and issues.



- ⓘ ISSUES
- ⚠ CROP DAMAGES
- 🕒 TRAPS
- 📅 CATCHES
- 🌱 PHENOLOGY
- 🐛 PESTS AND DISEASES
- 🧪 SOIL ANALYSIS

# Features

The screenshot displays a software interface for creating prescription maps. On the left, there are input fields for fertilizer name (Urea, 46% nutrient), number of zones (3), calculation mode (Average - direct), average nutrient (150 kg/ha), and variation from average (20%). Below these is a table with three zones: Zone -1 (1.55 ha, 176.78 kg/ha), Zone 0 (4.03 ha, 147.32 kg/ha), and Zone 1 (0.96 ha, 117.85 kg/ha). Summary statistics show a total fertilizer requirement of 2131.25 kg and a total area of 6.54 ha. On the right, an aerial map shows the field with three zones color-coded: Zone -1 in yellow, Zone 0 in orange, and Zone 1 in red. An inset map shows the field's location within a larger area. The interface includes a date selector at the top (Aug 31, 2022 to Sep 7, 2022) and navigation controls.

Zones	Area	Avg nutrient
Zone -1	1.55 ha	176,78 kg/ha
Zone 0	4.03 ha	147,32 kg/ha
Zone 1	0.96 ha	117,85 kg/ha

**Total fertilizer** 2131.25 kg  
**Total area** 6.54 ha



## PRESCRIPTION MAPS

Choose the most suitable vegetation index to develop the prescription map and carry out variable rate fertilization.



TOBACCO **DSS**

Agricolus s.r.l.

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