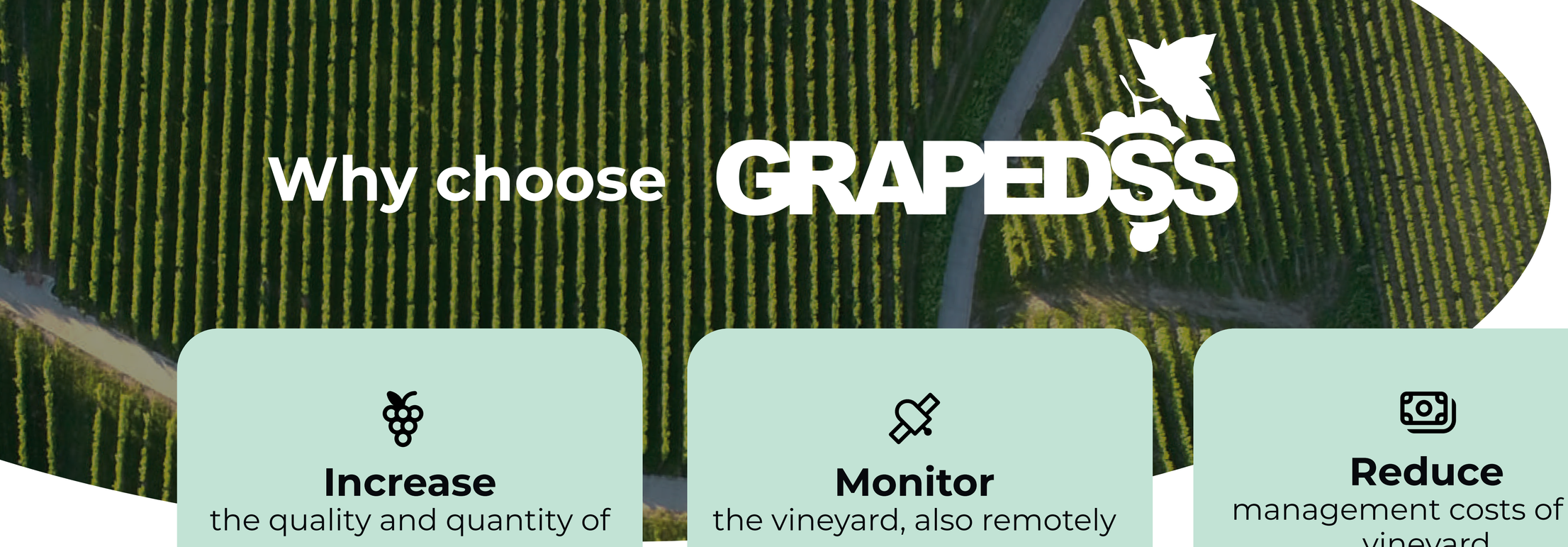
The DSS for vineyard management



Why choose GRAPEDSS

Increase
the quality and quantity of grapes

Monitor
the vineyard, also remotely

Reduce
management costs of the vineyard

Defend
in advance from pests and diseases

Intervene
promptly against frosts

Optimize
the use of inputs (water, treatments, fertilizers)

Features

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

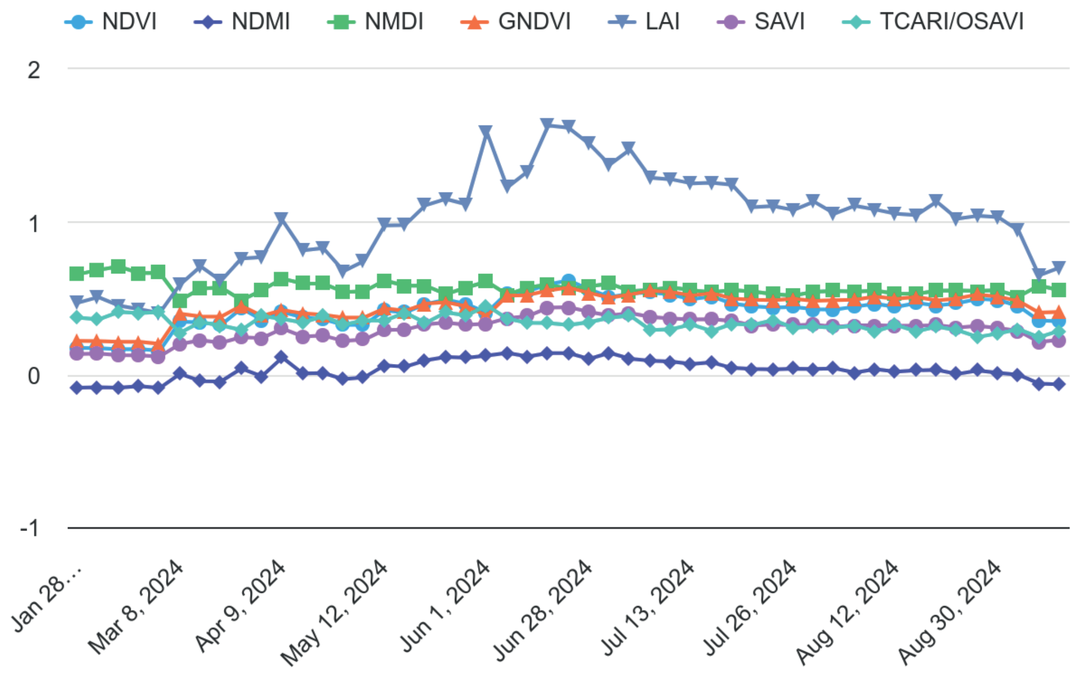
Upload a .shp or .kmz file..

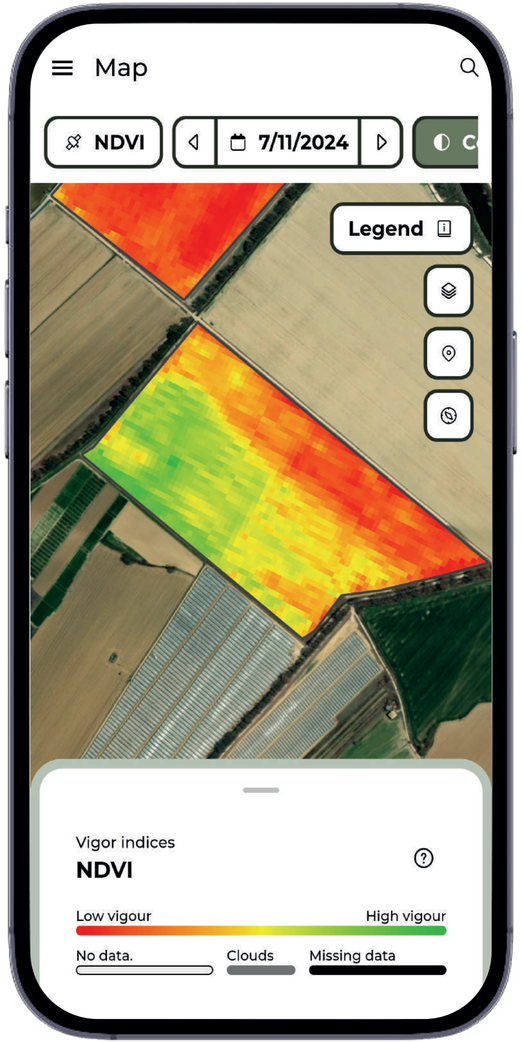
✓ Select

Features

SATELLITE IMAGERY

Consult Sentinel-2 satellite images with vigor, water stress and chlorophyll indices to promptly identify critical areas in the vineyard.

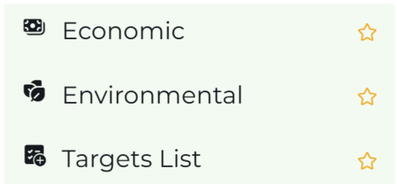


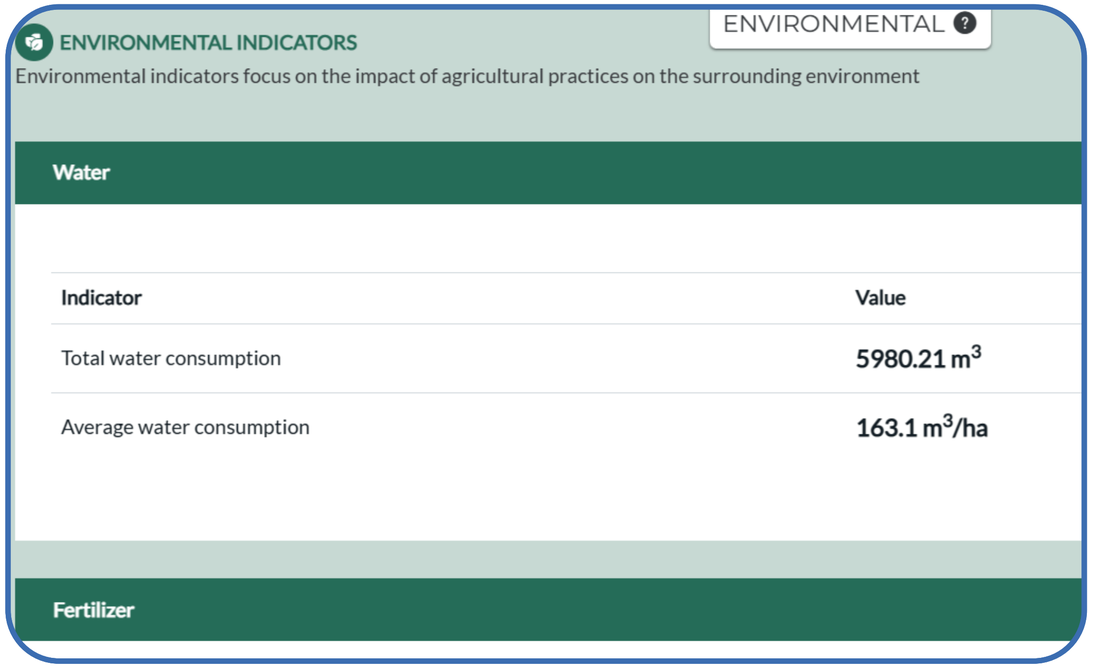


Features

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.



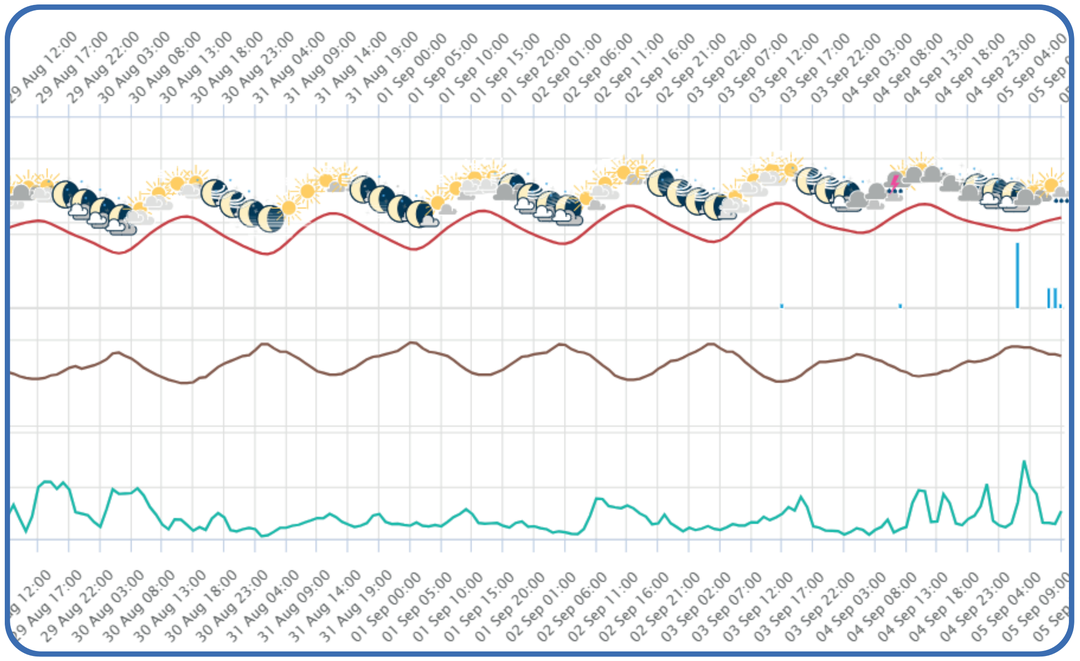


Features

WEATHER

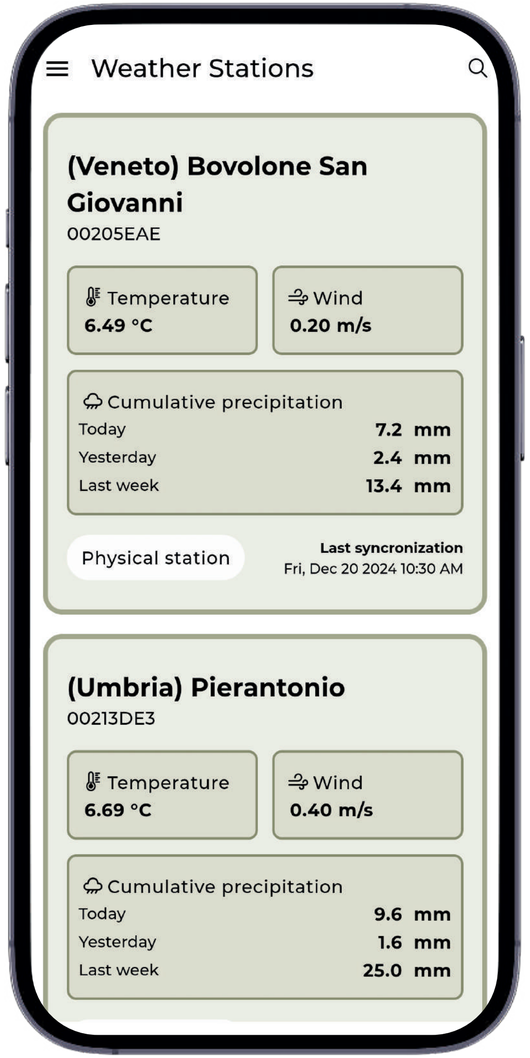
WEATHER FORECASTS

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



WEATHER STATIONS

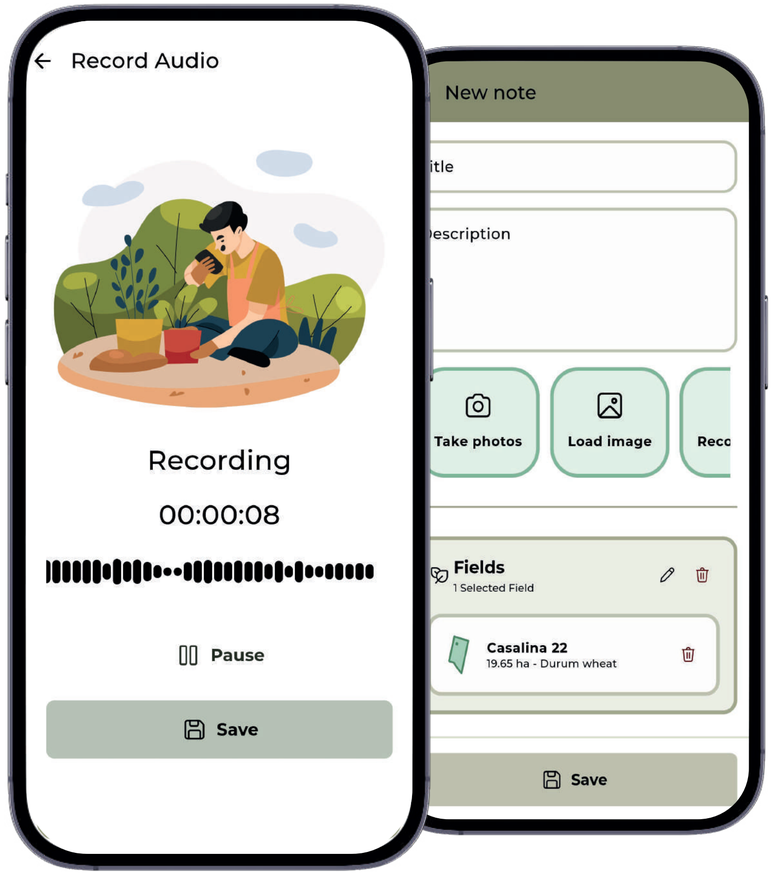
Virtual weather station includedt; *physical weather stations and sensors can be purchased or integrated, if already present in the company.



Features

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.



- ISSSUES
- CROP DAMAGES
- TRAPS
- CATCHES
- PHENOLOGY
- PESTS AND DISEASES
- SOIL ANALYSIS
- QUALITY MONITORING
- QUANTITY MONITORING

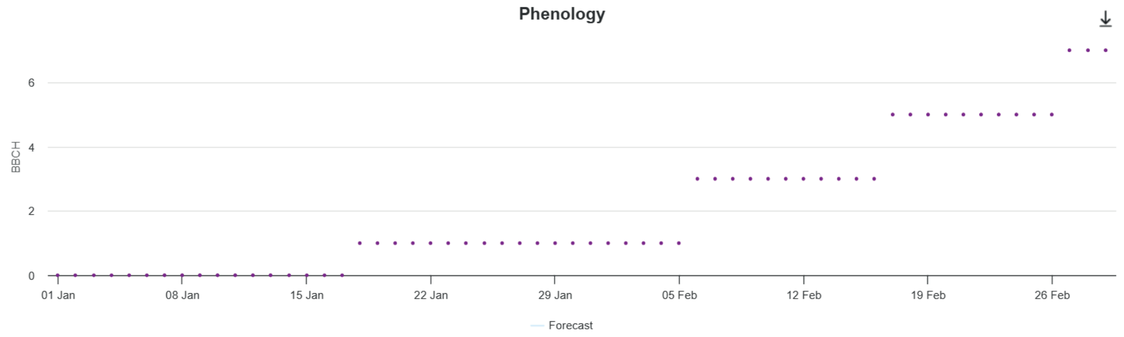
GRAPEDSS

Features

FORECAST MODELS

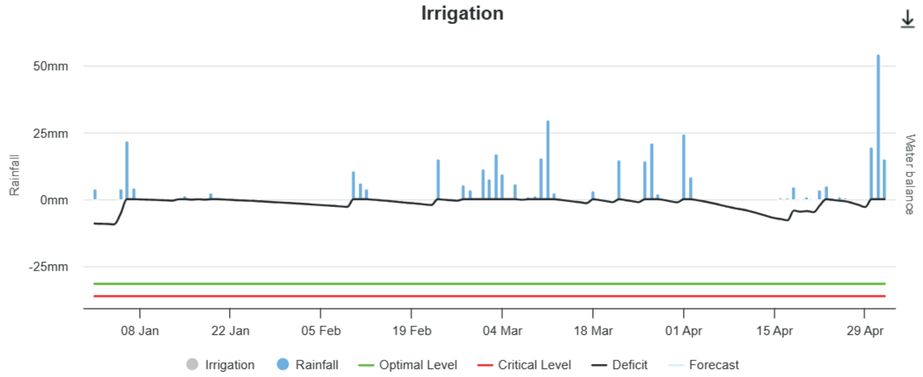
PHENOLOGY

Phenology forecasting to assess vineyard needs at each stage of development.



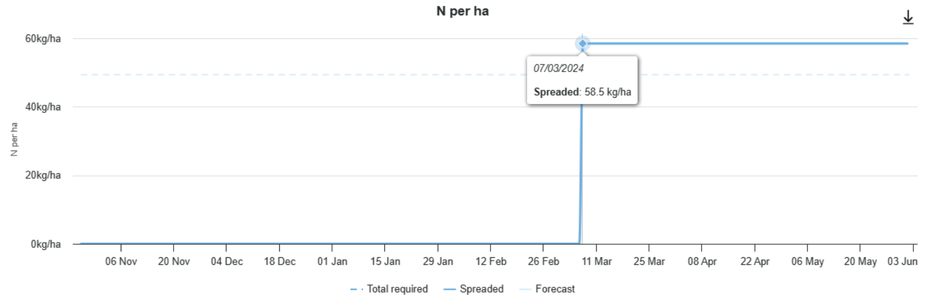
IRRIGATION

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



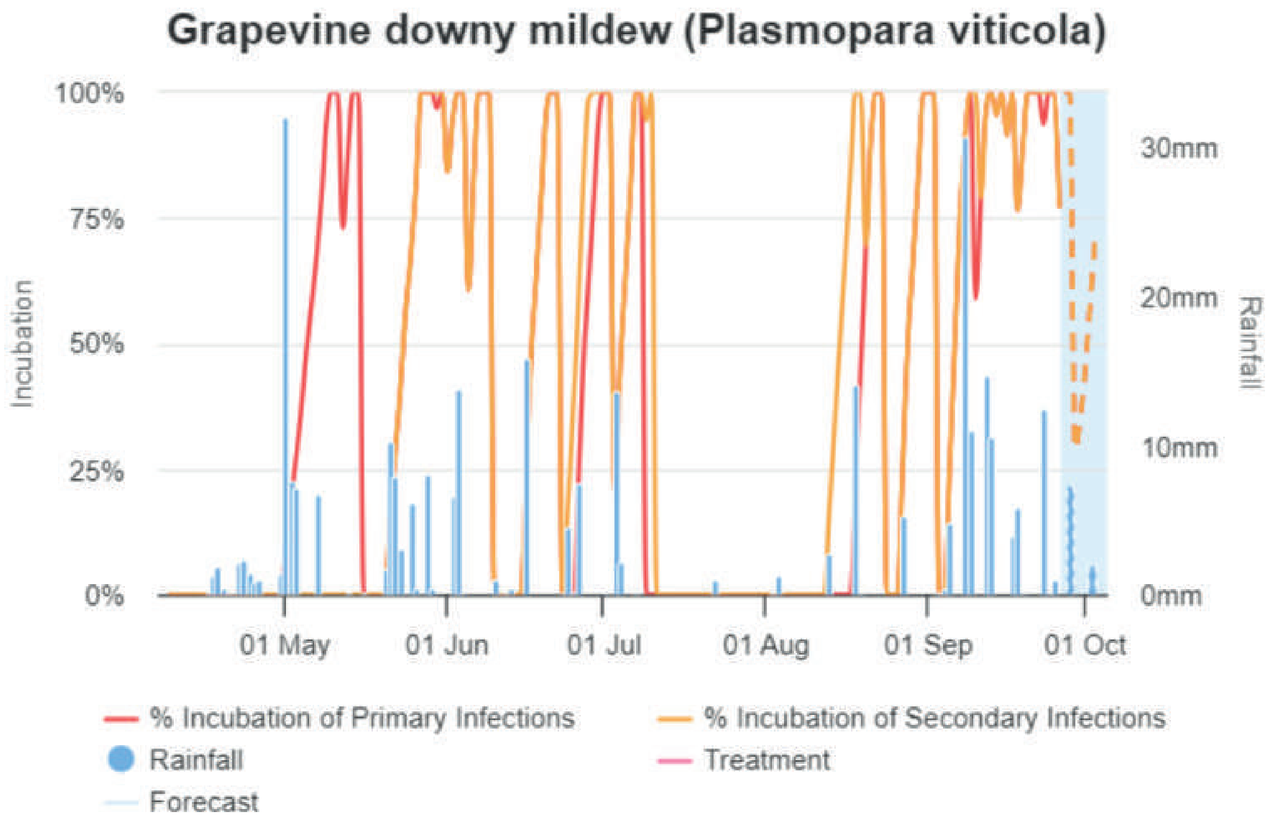
FERTILIZATION

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



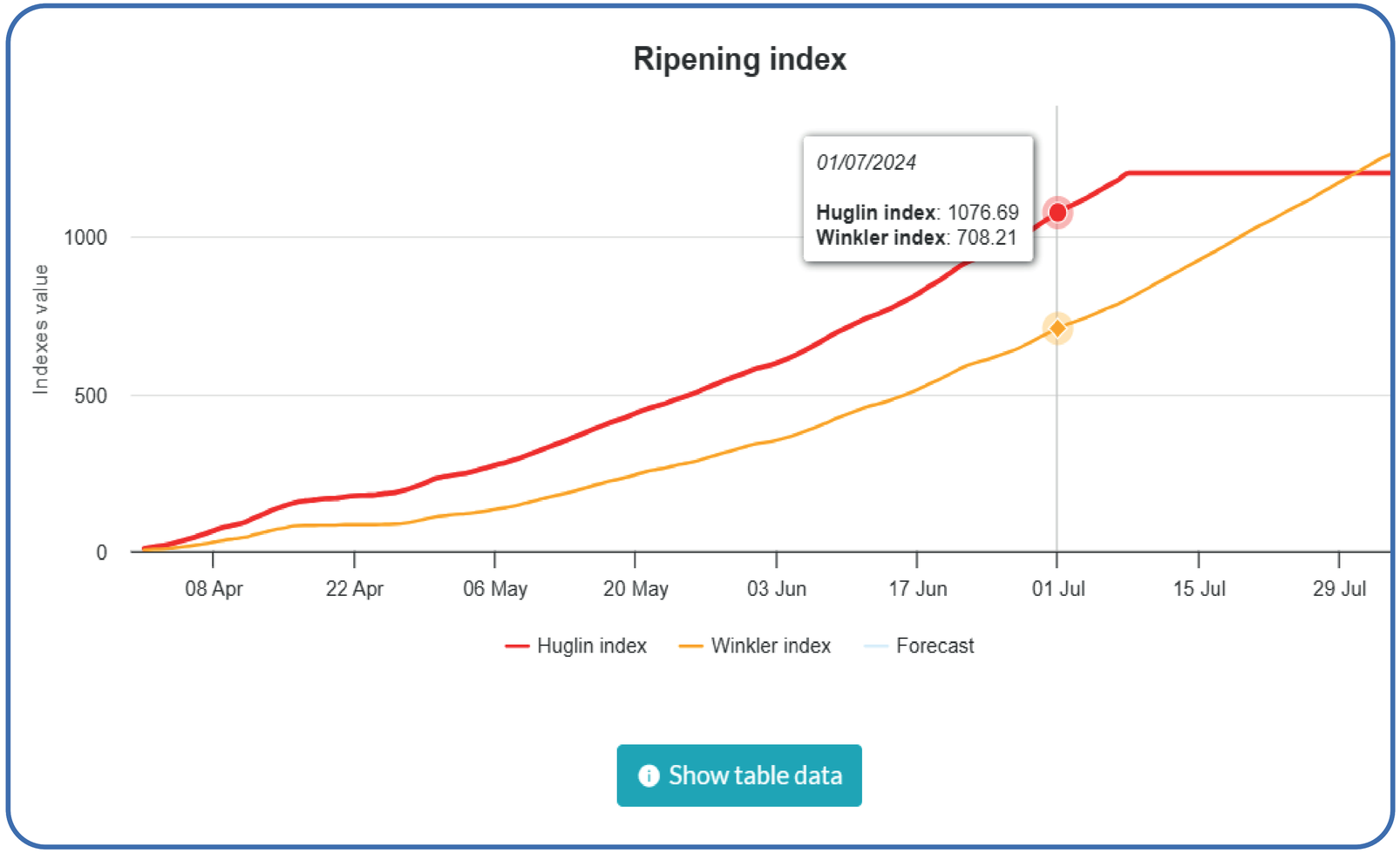
Features

PESTS AND DISEASE MODELS



Prediction of infestation and diseases to assess the risk of pest (**Lobesia botrana**) and diseases (**Peronospora, Powdery mildew, Botrytis cinerea**) and act promptly.

Features

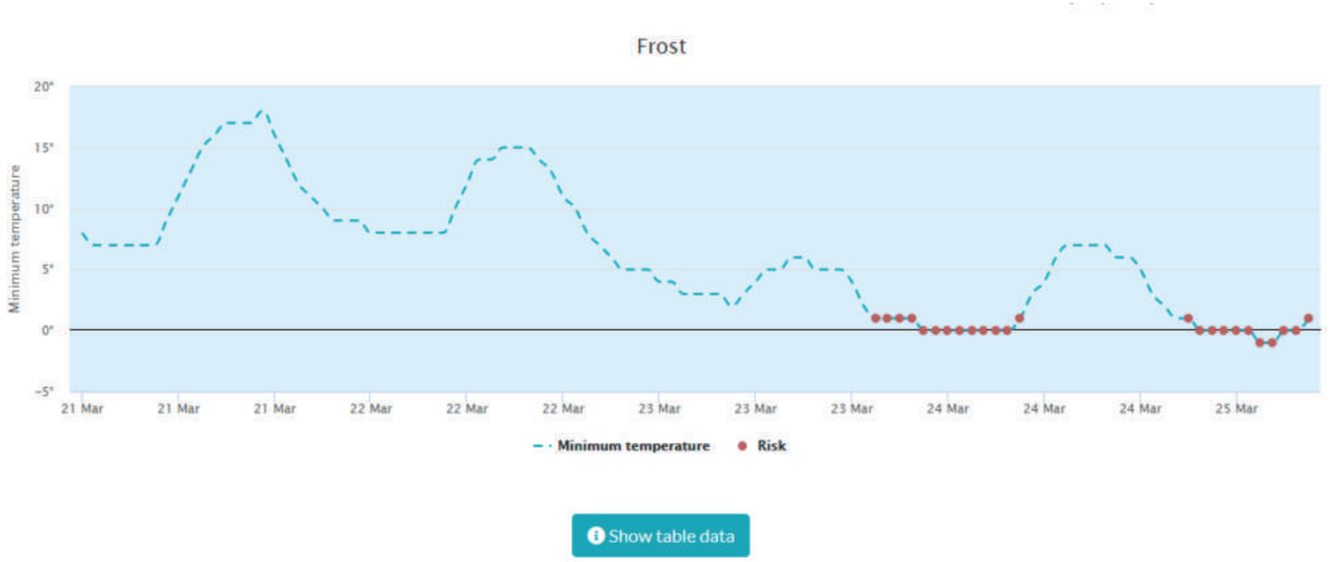


RIPENING FORECAST MODEL

Prediction of ripening to identify the best time for harvest and produce excellent wine.

Features

FROST MODEL

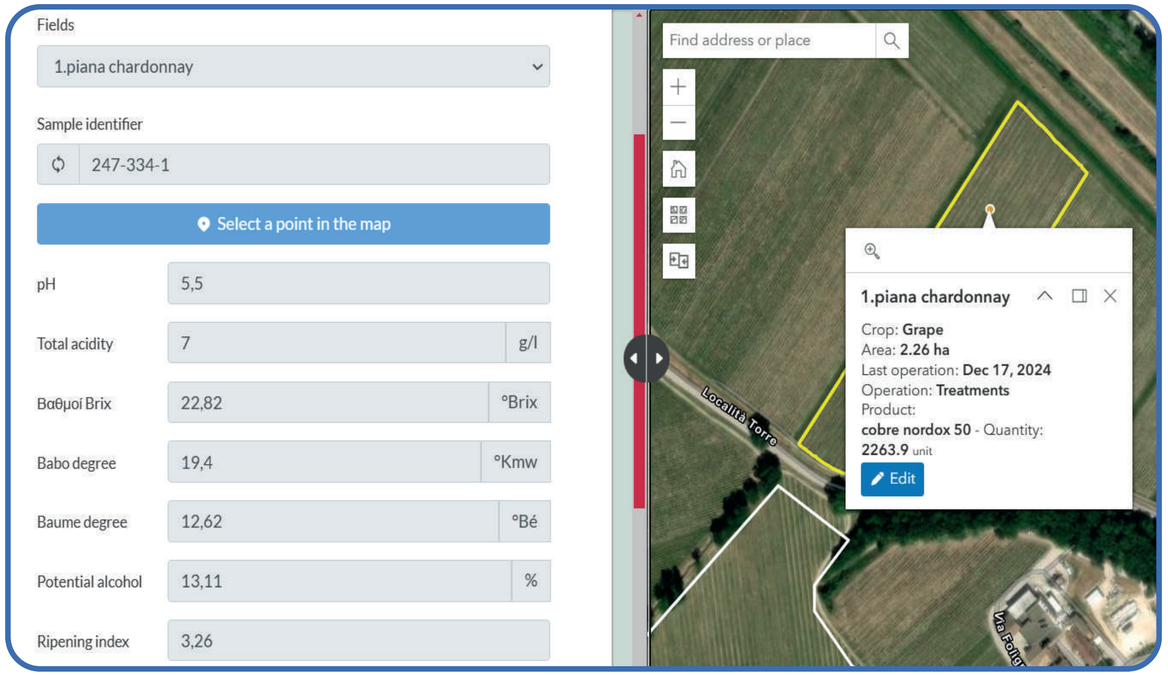


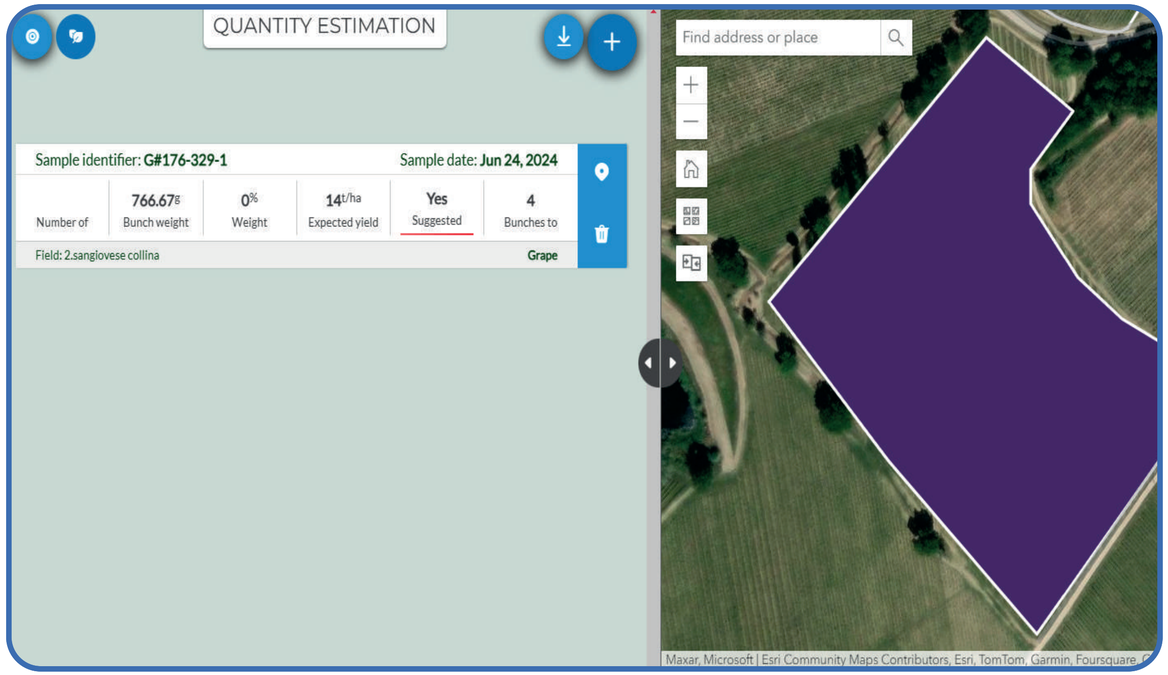
Frost forecast to know in advance (**up to 7 days before**) the harmful climatic event and the type of risk.

Features

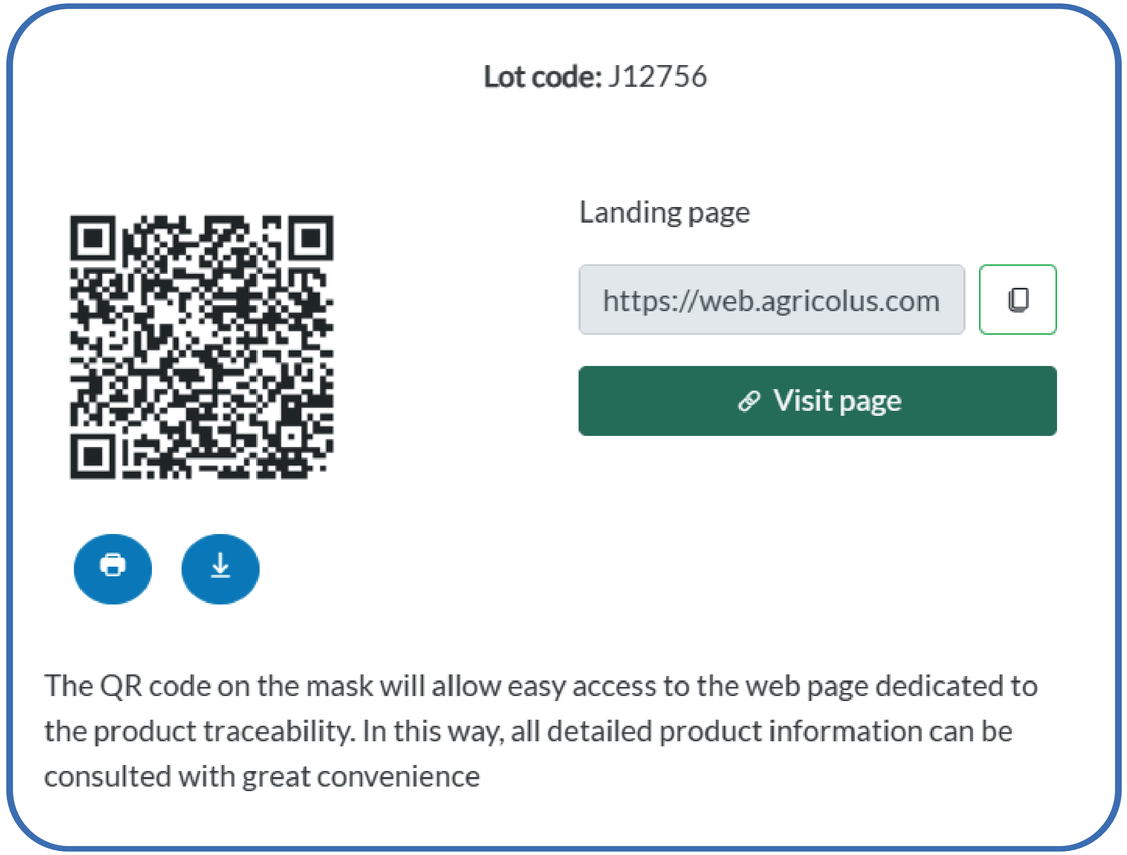
YIELD AND QUALITY MONITORING

Bunches count, thinning estimate, potential alcohol calculation and ripening index.





Features



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.

Features

WORK

TASK MANAGEMENT

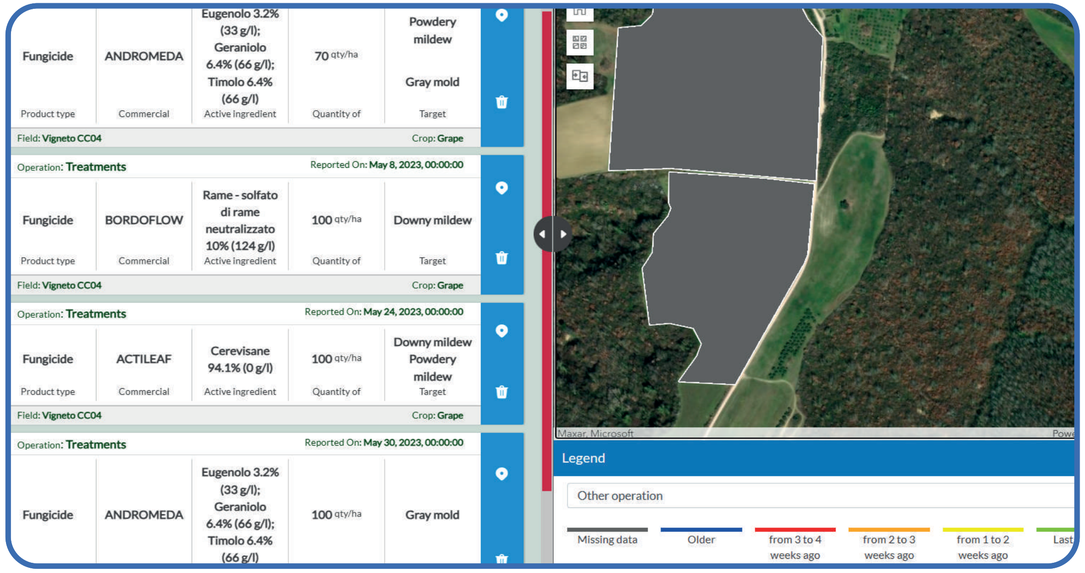
Create and assign to your collaborators the activities to be carried out in the farm **in real time**.

MACHINARY

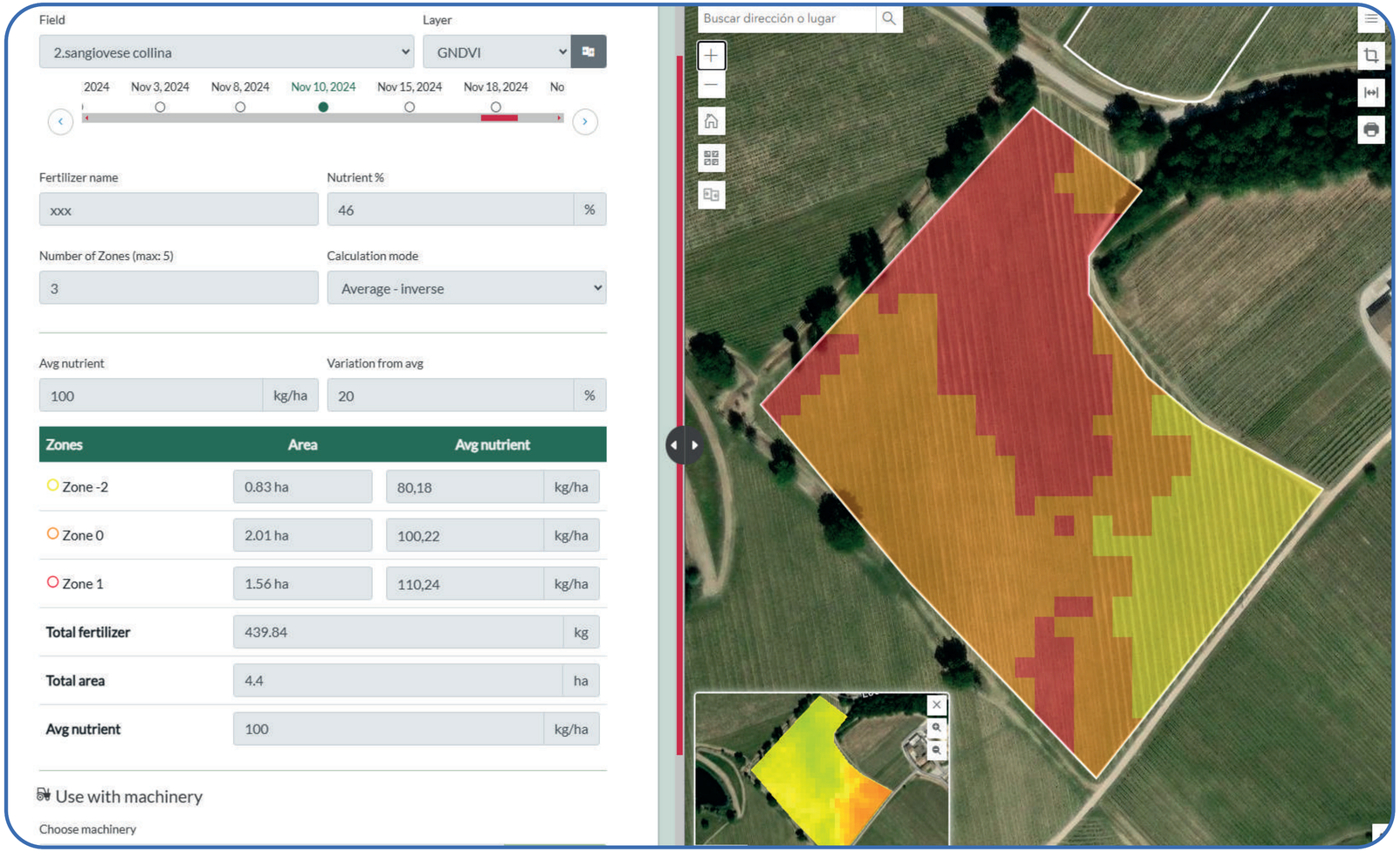
Register your agricultural machinery, any problems and maintenance carried out. You can also connect them to Agricolus by using **Agrirouter**.

CROP OPERATIONS

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



Features



PRESCRIPTION MAPS

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

Features

DECISION SUPPORT

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

ALERTS ON VINEYARD PROTECTION MODELS

FORECAST OF PESTS AND DISEASES OF PLANTS AND INSECTS

5 *Adults*
European grapevine moth

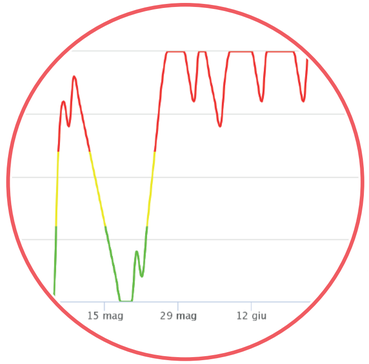
No risk
European grapevine moth

12 HOUR WEATHER FORECAST

100% *Presence*
46% *Intensity of damage*

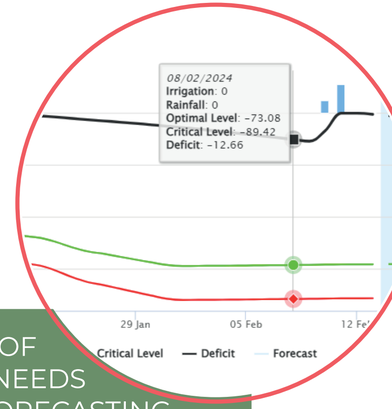
next 12 hours forecasting

ESTIMATION OF FRUIT RIPENING



High risk
The development conditions are very favorable, evaluate whether to carry out a field treatment
Grape Powdery mildew

0 *Huglin*
0 *Winkler*
ripening



High risk
Use psychotropic and systemic
Grapevine downy mildew

0mm
idro requirements

ESTIMATION OF IRRIGATION NEEDS FROM THE FORECASTING MODEL

First leaf unfolded and spread away from shoot (BBCH 11)

RISK LEVEL LEGEND

High risk
Alert level

FIELD REPORTS ENTERED BY THE USER AND INTEGRATED INTO THE PHENOLOGICAL FORECAST MODEL

GRAPEDSS

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