



## Prevention and monitoring of crop adversities



### TECNOLOGY TO FIGHT ADVERSITIES

AGRICOLUS AWARENESS gives support against plant diseases and other adversities that affect crops. It provides:

- weather data;
- information about plant pathogen spread and infestation degree;
- information and alerts to administer treatments on time.

Information provided is based on:

- data collected by weather stations or sensors placed in plots;
- leading weather services.

### MONITORING EVERYTHING WITH MAPS AND ALERT SYSTEMS

In the fight against adversities, operators will be supported by:

- queried maps referred to parcels and information about plant pathology spread;
- weather data referred to each plot;
- graphs, statistics and forecast models.

Many functionalities are available on the Agricolus application store.

For example, there is a service for generating predictive models, which provides information about causes and spread of diseases.



### COMPARISON WITH TRADITIONAL METHODS

If not recognized on time, many adversities, such as plant diseases, cause huge product losses.

In order to limit the damage, it is essential to be informed since the beginning about the emergence of plant pathologies and of conditions which could cause them.

### ADVANTAGES

- Preventing crop disease
- Acting promptly
- Containing disease spread
- Containing product losses

Technologies used:



Awarded by:



## APPLICATION FUNCTIONALITIES

### WEATHER DATA REFERRED TO SPECIFIC AREAS

The application provides weather data collected by service stations or by IoT sensors installed in the plots. Sensors provide information about microclimate referred to a specific area, in order to evaluate probability of plant disease occurrence.

### INFORMATION BY SOIL AND PLANT SENSORS

The application interfaces with IoT sensors installed on the parcels, which provide important information about the response of soil and plants to meteorological conditions.

### CHARTS AND STATISTICS

- The application produces graphs and statistics for analysing adversities. For example:
- Comparison of pathogen spread in subsequent years.
- Comparison of pathogen spread in different periods of the year.
- Comparison of pathogen spread in different plots.
- Support for treatment planning.
- Alerts in case of pest.

### ALERTS

In case of critical issues, the system provides alerts in order to act promptly.

### AGRICOLUS MARKETPLACE

Some additional functionalities are available in the application store. One of these is a service for generating predictive probability models about beginning and spread of diseases in a plot.