

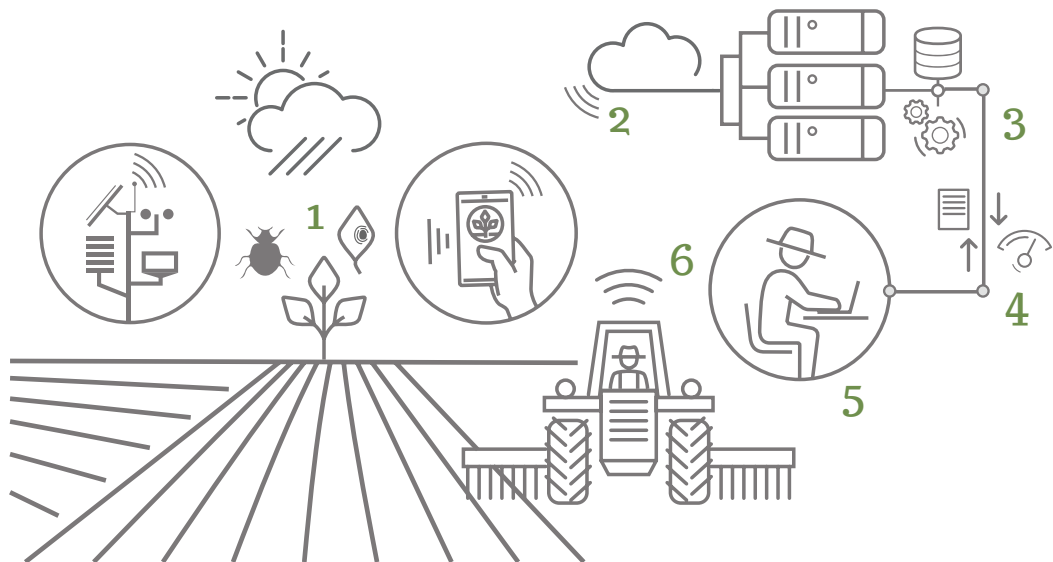
olivo.net[®]

ENHANCE YOUR OLIVE PRODUCTION

What is olivo.net[®]?

olivo.net[®] is an interactive web-based tool for olive cultivation according to sustainable olive sector principles.
olivo.net[®] is a DSS - an expert Decision Support System.

DSSs are IT platforms that collect crop data in real time, through sensors and scouting tools (1), organize the data in Cloud systems (2), interpret them via advanced modelling and big data techniques (3), and integrate them automatically, generating information, alarms and decision support advice (4). Users resort to these data for precision crop farming management (5). Databases (6) also include farming data, so as to generate a continuous flow of updated information between the crop, the DSS and the user.



SYSTEM ARCHITECTURE

The crop and farming environment data are sent to olivo.net[®] on a continuous basis, through sensors and monitoring activities.



HOLISTIC APPROACH

olivo.net[®] considers all aspects of farming techniques.



WEB APPLICATION

No software PC installation required. The system constantly updates the apps.



EASY AND CLEAR

olivo.net[®] can convert complex climate and farming processes into easy and clear on-field choices.

olivo.net® - Background

Horta DSSs are the result of a complex innovation and knowledge transfer process.



Agro-Meteorological Network

Horta manages a network with hundreds of agro-meteorological stations across Italy. Weather data - gathered through a certified quality system ([CCPB of Bologna](#)) - supply key information in real time to the DSSs.



Customer Service

Horta offers a complete service. Horta technicians guide users in getting to know and using the portal, and help them take full advantage of all DSS potential. In addition, Horta produces newsletters to provide technical updates at key points during the season, and recommendations on how to use the portal to meet the crop's needs.



R&D

Horta DSSs have highly innovative contents. Innovation is generated through constant and intense research activities, in partnership with the best Italian and foreign universities and research centres. In addition, the service includes the support and monitoring activities supplied by the technicians and producer organizations headed by [UNAPROL](#).

How does it work?

Horta DSSs are expert systems that integrate different information sources to produce easy and effective advice and alarms. DSSs do not replace agricultural technicians or entrepreneurs: their goal is to provide additional information to improve crop farming decision-making processes.



Geolocation

Every plot of land added to the DSSs is geolocalized, so that the system can keep track of the geographical characteristics of the farming site.



Soil

DSSs take into account the soil physical-chemical characteristics for each crop, in order to better define the water and nutritional needs of the crop.



Product Features

DSSs use updated plant protection and fertilizing products databases, detailing all the technical specifications to select the products that best suit each application, also in relation to anti-resistance strategies.



Variety

DSSs take into account the specific characteristics of each variety, simulating the plant phenological development and growth rate.



Weather and Forecast

DSSs acquire weather data and forecasts on an hourly basis, and use them in the mathematical models and decision support tools made available to the users. For this reason, Horta DSSs are an efficient tool to adapt farming techniques to climate change.



Ideal Recipients

Horta DSSs are flexible tools that can benefit many kinds of different users.



Technicians

Technicians who work for public bodies and producer organizations, private consultants, farming equipment network technicians: they can all use Horta DSSs to supply prompt and expert advice based on scientific information to production farmers. They can also organize their work and business visits based on DSS alarms, therefore optimizing their time and work skills.



Farming equipment manufacturers

Farming equipment manufacturers (varieties, fertilizers, plant protection products, biocontrol agents, etc.) can use Horta DSSs as tools to enhance their products, by helping users exploit the genetic potential of different varieties and the distinctive features of each product.



PO/Groups

Producer organizations can use Horta DSSs to address and monitor their partners' production processes, check the fulfilment of specific production goals, organize delivery, and supply homogeneous lots to their partners.



Olive growers

Thanks to Horta DSSs, production farmers can increase their product yield, quality and health, and reduce production costs and negative effects on health and on the environment, in line with the modern principles of economic, environmental and social sustainability, integrated production and IPM (Integrated Pest Management). In addition, using the DSSs allows farmer to monitor the entire production process in a knowledgeable manner.

Every day by your side

Horta DSSs are the result of a complex innovation and knowledge transfer process.



Oil development

olivo.net® provides an estimate of the phenological development of the olive reproductive phases for the main olive varieties. In addition, it provides an estimate of the oleic acid accumulation and of the polyphenols degradation dynamics, in order to quality the ripening process.

Scheduling interventions based on the plant development.



Pest management

Through inset phenology and mortality predictive models, olivo.net® can be used to control the olive fly and peacock spot, assess the need to intervene, and choose the best plant protection products.

**Control pests effectively,
reducing the number of interventions.**



Water balance

olivo.net® can be used to estimate the soil water balance, based on soil analysis, rooting depth, plant evapotranspiration, recorded irrigation and rainfall measured by the relevant weather station, in order to time irrigation and prevent prolonged water stress.

Avoid the plant water stress, and schedule irrigation/fertilization interventions based on the soil water provision.



Traceability

The Farm Operations Register on olivo.net® can be used to record all olive grove operations, from soil tillage to product delivery.

Provides an overview of all farm management operations.



Sustainability

olivo.net® allows assessing the environmental impact of any olive grove cultivation and company decision, through aggregate indicators (Health, Soil, Air, Biodiversity, Energy, Water).

Calculate the environmental impact of your crop.

Why use olivo.net®?



**REDUCE
PRODUCTION
COSTS**



**REDUCE NEGATIVE
EFFECTS ON
HEALTH AND ON
THE ENVIRONMENT**



**COMPLY WITH
REGULATION**

D.2009/128/EC and with the National
Action Plan (Ministerial Decree of 22
January 2014)