From Integrated Pest Management to Predictive Pest Management

Pedro

CARRILLO DONAIRE

Founder and CEO, ec2ce
Promotion of IPM is a cornerstone of the Directive

IPM is one of the tools for low-pesticide-input

IPM must be implemented by all professional users
2017 – Implementation Report from EU COM

- MS should improve their NAPs significantly to address shortcomings
- Absence of measurable targets in the majority of MS
- IPM practices were more widely implemented in vegetable production, greenhouses and nurseries than in arable land
2019 - Innovation for Sustainable Crop Protection

The Future of Crop Protection in the EU
8th April 2019
The Residence Palace, Brussels

What further and future strategies, options and innovations?

- More active assistance to drive IPM
- Optimal & precision treatment
- New service-based crop protection model
- **Forecasting, Big Data**

The IPM Action Triangle

Key area to apply “easy-to-use” predictive technology to induce a more responsible direct crop protection

Integrated Pest Management

- Farmer
- Technician
- Coop
- Company

Late Reaction

Business as usual...and not very effective
Integrated + Predictive Pest Management

Monitored Data
- Farmer
- Technician
- Coop
- Company

EU Open Data
- Sentinel Indexes
- ESA & ECMWF Climate
- Copernicus program
- GIS
- Climate Change Service

Modeling

Informed Anticipated Action

How to become more climate friendly and sustainable
Olivia: A.I. serving Predictive Pest Management

Details at parcel level, input data interface

Regional map integrating all users
Olivia: facts & figures

- Commercial tool (SaaS) since 2016
- >400,000 Ha of olive in Spain & Portugal
- 8 million predictions in one campaign
- 4 weeks forecast
- 80% averaged accuracy
- 30% of spraying avoided
- Users willing to pay 5-10 €/ha
Technology brings a more sustainable pest control

- Capacity to predict **when and where** to use pesticides
- Capacity to extend the solution to **any crop and geography**
- **Pesticides savings** estimation according to recommendations
- Predicting **insects in traps and fruit affected**
Actions to roll out in EU

- Visibility of existing results in pioneer regions in Spain & Portugal
- Support to consolidate *Olivia* throughout EU olive regions
- Extend AI based predictive pest technology to other crops
- Boost open data in monitoring pest and diseases
- Put in value Climate Change Service and Copernicus Program

Promote the use of BAT in Pest Management
We are the Predictive Agriculture