

ENVIRONMENT MONITORING

Predict weather conditions and disease outbreaks



INDUSTRY: Environment

YEAR: 2013

THE CHALLENGE:

Design a Hardware/Software system able to predict specific whether situations that precede an outbreak of key crop and plant diseases.

THE SOLUTION:

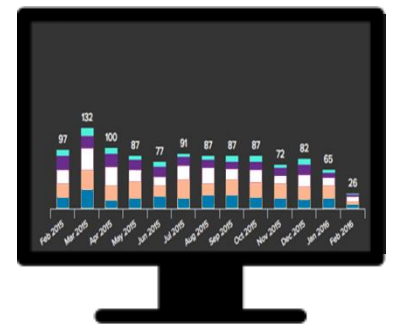
We cooperated with scientists from botanic gardens to develop a twofold solution that collects and combines information predicting conditions that favour pest and disease outbreaks.

The solution is composed of two families of sensor:

- a suite of sensors checking weather conditions (temperature, humidity...);
- a suite of sensors checking plants conditions (humidity of the ground, humidity/water drops on the leaves...).

TECHNICAL SHEET:

- Application developed on Stetel's IoT architecture;
- Interface with virtually unlimited type of sensors:
 - Humidity
 - Pressure
 - Wind
 - Rain
 - Temperature
 - Leafs humidity
 - Ground humidity
- Communication to back-end implemented via GSM;
- Back-end functions: monitoring, reporting, modelling, device management, software distribution/upgrades.



THE RESULTS:

60% improvement in field management.



Stetel is an Italian company developing mobile apps and software enabling the Internet of Things and Rich Communications.