

MERIAVINO

Multiscale Sensing for Disease Monitoring in Vineyard Production



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Goal and context

- EU have approximately 3.2 million ha of vines
- Diseases are increasing and impacting significantly the production
- Managing Vine diseases is an important challenge







Main project activities / challenges

- Vine diseases monitoring, reducing the pesticide use
- IoT, Remote sensing and big data technologies
- Three vineyard sites: Romania, Greece and France







Objective and Hypothesis

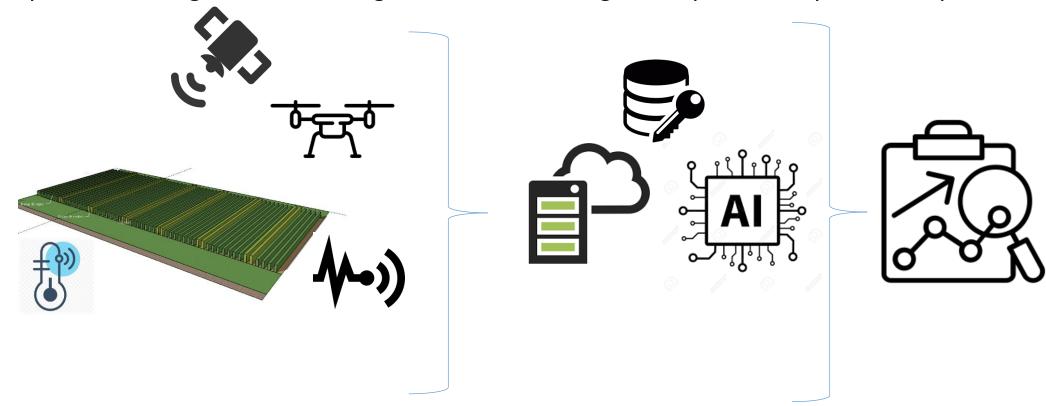
- Hypothesis: heterogenous data from vineyards in different countries will enable to develop robust decision tools based on AI
- Intelligent acquisition methods and processing of Big Data
- ML approach for finding data patterns enables earlier detection of the vine diseases, and the estimation of yield quality and quantity.
- Earlier disease detection and localization will help winegrowers to reduce phytosanitary chemicals.





Research approach & activities

- Multiscale approach
- Data protection and analysis, prediction models and decision tools
- Vineyard monitoring, Remote sensing, IoT, Artificial intelligence, Cybersecurity, Data analysis







Potential impact

- Helping vine farmers and companies to access real-time information and diagnosis decisions
- Disease identification/warning, prediction, and localized treatment will help to make concrete and strong actions for sustainable development and landscape preservation
- Innovations in the agriculture and food industry





Cooperation with Stakeholders / value chain

- Winegrowers, companies
- Through partners: French Institute of Vine, Atos company
- Collaboration, regional, National and European Stakeholders





Dissemination and outreach

- General public communication
 - Project website
 - Results
 - News ...
- Targeted communication
 - Scientific workshops, conferences and side events
 - Stakeholders' workshops, events,...





Partners / funders

Partner	Туре	Country	Funder
INSA CVL	Academic	France	ANR
CMU	Academic	Romania	UEFISCDI
SVM	Academic	Romania	UEFISCDI
UNIWA	Academic	Greece	GSRI
IFV	Service	France	ANR
ATOS	Company	France	ANR











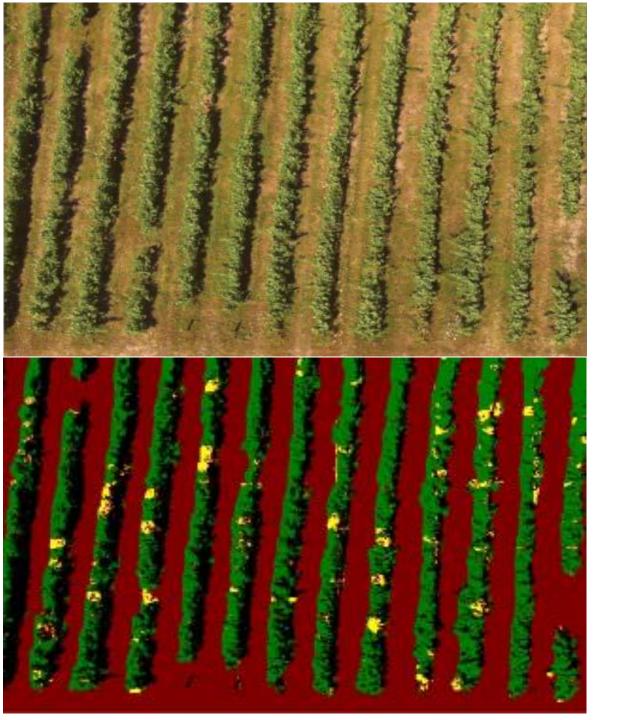














LET'S KEEP IN TOUCH!

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Thank you for your attention!