



TECHNICAL TOUR

WEDNESDAY 10 JULY 2019





PROGRAMME

07:30 : Departure from campus

8:30 : Arrival on the estate (welcome coffee)

8:45 - 9:15 : Welcome on the estate in the hangar:

1. Presentation of « Domaine du Chapitre »
2. Presentation of « Mas numerique » project
3. Presentation of the workshops, location, timing. Free visit of the congress participants

9:30 : Workshop Start

10:15: Workshop Start

11:00 : Workshop Start

11:45 : Workshop Start

12:30 : End of the workshops/start of the lunch, possibility to go to the cellar during the meal, meal in the hangar.

13:45 : Departure to Montpellier SupAgro for the rest of the sessions.

During the day, you will be able to choose 4 sessions (time constraints).



STAND PRESENTATION

Title: UX11Ag Demo

Name and titles of the stakeholders :

Lénaïc Grignard : *Agriculture and Forestry Product Manager*

Loïc Pavard Direct : *Sales Manager Agriculture and Forestry*

Alexis Janson : *Applied Product Engineer for Agriculture and Forestry*

Description:

Delair is a leading provider of end-to-end, drone-based solutions that enable enterprises to digitize their physical assets and turn the collected data into valuable business insights. The company's offerings combine high performance, long range fixed-wing UAV hardware with Delair Aerial Intelligence (delair.ai), the industry's most powerful platform to manage, analyze and share aerial data. Its solutions are sold in over 70 countries with a network of more than 100 resellers in different industries, including agriculture and forestry. Solutions encompass phenotyping applications for field trials or inventory in plantation and forestry. During the workshop, Delair will present a long range open payload UAV, the DT26, run a live demo of the UX11Ag drone with a multispectral sensor and present the outputs of the processing with Delair.ai software.





STAND PRESENTATION

Title: Parameterization of a model-based Decision Support System (DSS) used to track vine water status

Name and titles of the stakeholders:

Sarah Djafour : agricultural engineer

Description:

Vintel is a decision support system that helps winegrowers to follow vine water status based on predawn and midday leaf water potential. The first and the most important part is the parameterization, and there are different ways to do it, depending on the production objectives.



itk

PREDICT AND DECIDE



STAND PRESENTATION

Title: Investigation on 2D LiDAR based indicators for predicting agrochemical deposition within a vine field.

Name of the stakeholders:

Anice Cheraiet, Mathilde Carra, Sébastien Codis, Olivier Naud.

Description:

One strategy to reduce the use of plant protection products in viticulture is to adjust the dose rate according to crop parameters. The principle is to join the use of 2D Lidar sensors to geo-referencing tools (GPS) in order to evaluate the vegetative development within the vineyard plots. The objective is to be able to calculate, from the measurements of these sensors, indicators (such as areas, volumes, density) relevant in order to adjust dose rate. The development of models between spray deposition and crop parameters is part of our projects.





STAND PRESENTATION

Title: Weedelec : a robotic platform for electrical weeding

Name of the stakeholders:

Dr Gilles Rabatel - Scientist - IRSTEA, France

Shiyu Liu - Robotic engineer - IRSTEA, France

Description:

We will show and demonstrate the platform architecture which is based on a robotic parallel arm. Examples of weed detection by hyperspectral and RGB camera (deep learning) will be shown on screen. If possible, plant destruction by high voltage actuator will be demonstrated in situation.





STAND PRESENTATION

Title: Sensory workshop - Wine tasting

Name of the stakeholders:

Nicole RADA - Marketing Manager

Xavier CHAUSSARD - Precision viticulture R&D

Description:

Vivelys proposes to the assistants to participate in a workshop of sensory comparison.

2 red wines produced in 2018 at the Domaine du Chapitre will be tasted and noted with Sensiel®, a new professional software for sensory analysis, developed by Vivelys.

You will need to use your Smartphone with Internet connection in order to participate in this workshop.



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WINE BY DESIGN



STAND PRESENTATION

Title: Bacchimeter & Dualex, optical sensors for vine characterization

Name of the stakeholders:

Julien Izard - Soufflet Vigne, Chef de région Languedoc Roussillon

Florian Duranti - Soufflet Vigne, Commercial Vin

Paul Gougis - FORCE-A, Sales Manager

Description:

Presentation of Bacchimeter, new maturity sensor and characterization of vine nitrogen status thanks to Dualex device.





STAND PRESENTATION

Title: Automatic pest monitoring with smart connected trap.

Name of the stakeholders:

Nicolas DAÛY - CapTrap® product manager

Description:

CapTrap® automated pest recognition and counting service allows real time detection of pest insect flight peaks for a better pressure forecast to protect crops while reducing monitoring costs. Together we will make a small overview on the automated traps available on the market, their main technologies, and their benefits and perspective for decision making.





STAND PRESENTATION

Title: Remote Sensing for vineyard management: highlight on operationnals services and R&D actions at TerraNIS and ICV

Name of the stakeholders:

Sylvie DUTHOIT, TerraNIS, responsable R&D

Eve LAROCHE, TerraNIS, master thesis

Jérôme HOURDEL, ICV

Description:

The objective is to give a view of the services and tools already distributed or in development at TerraNIS and ICV. We will particularly focus on the CEnoview®precision viticulture service, available worldwide (based on SPOT-/7 imagery) and on a new platform allowing to monitor vine development all along the growing season (based on Sentinel-2 imagery).





LANGUEDOC WINEGROWING

- Languedoc-Roussillon is the largest wine region in France by surface area: 236 000 hectares and by the number of vineyards (26% of French farms) or 18 000 exploitations.
- Producer cooperatives are a majority and accounts for 70% of production and 9 out of 10 operators in a cooperative cellar.
- Cooperatives have restructured to care about territory disposition, and reinforce the winemakers' income.
- The key numbers:
 - 200 Cooperatives or Unions of Wine Cooperatives,
 - 150 000 hectares of vines,
 - 15,000 cooperative winemakers,
 - 9 000 000 hectoliters of wine,
 - 1,700 employees on permanent contracts





THE DOMAINE DU CHAPITRE

- The "Domaine du Chapitre" is located in the village of Villeneuve-lès-Maguelone In Languedoc, 10 km south of Montpellier. Between the Languedoc garrigue and the sea, and a soil with a strong Mediterranean identity, they cultivate 35 ha of vineyard and 5 ha of olive trees,
- The vineyards are mixed traditional varieties of the region (Grenache, Syrah, Mourvèdre) and more recent varieties (Merlot, Petit-Verdot, Viognier). Its originality lies mainly in the cultivation of grapes still little known. The Domaine du Chapitre is indeed the cradle of Marselan, Caladoc, Aranel and Chasan grape varieties developed par INRA - SupAgro. Thanks to this diversity, they offer a range of white, rosé and red wines.
- The exploitation of their 5000 olive trees allows them to produce "virgin extra" oils of different varieties: Picholine, Rougette, Cayon, Arboussane, Arbequine.



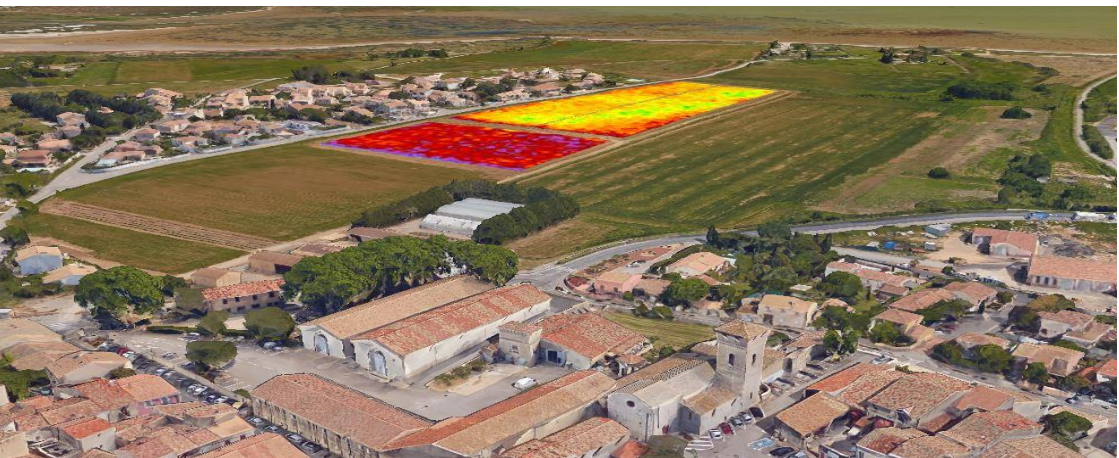


THE « MAS NUMÉRIQUE »

- Located at the Domaine du Chapitre of Montpellier SupAgro, the “Mas numerique” stands out by its Mediterranean geographical color. It is an unique system, It extends over a farm of about one hundred hectares, composed of vineyards, olive trees, field crops and garrigue.
- It is supported through financial sponsorship by the companies SMAG, Vivelys, Pellenc Pera Oenoprocess and ITK as well as fourteen other companies that expand additional services and know-how.
- For the profession, this farm constitutes a privileged place to carry out thematic visits, training, demonstrations in this real and prospective context and the marketing of the various devices. And through this dynamic process, the companies of the Mas numerique send a strong signal about their desire to be part of a relevant and interoperable digital agriculture for users.

Web site: www.lemasnumerique.agrotic.org

Twitter [@masnumerique](https://twitter.com/masnumerique)





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MONTPELLIER 2019

12th European Conference on Precision Agriculture

PARTENERS OF TECHNICAL TOUR

