

# Vinitech-Sifel

An overview of Wine and Viticulture innovations from the 2014 conference.



Pursuing growth with next  
generation energy

[www.bowmanviticulture.com.au](http://www.bowmanviticulture.com.au)



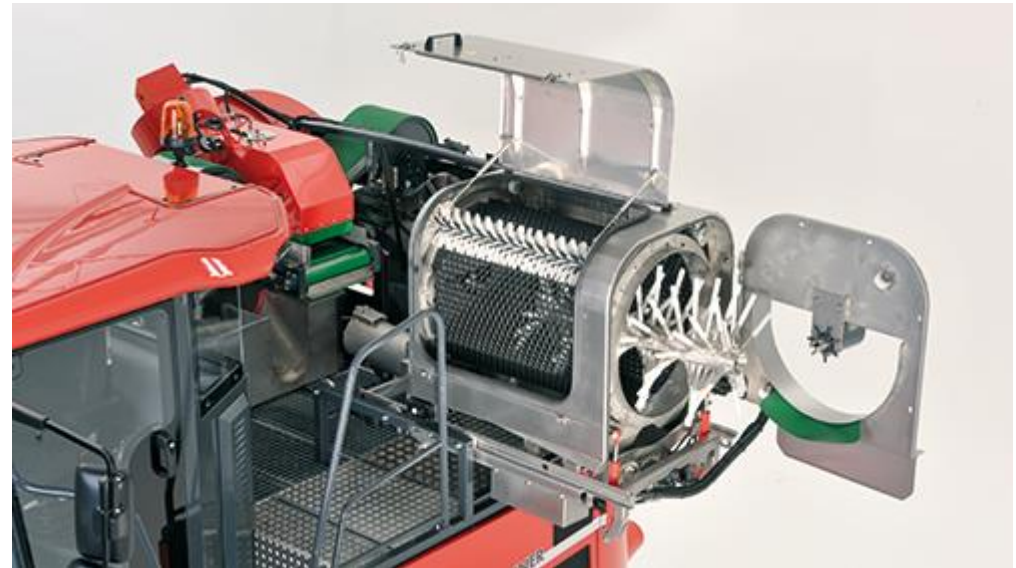
# Vinitech-Sifel 2014

- Held in Bordeaux, France in December 2014. The largest gathering of Wine and Viticulture suppliers in the world.
- 850 exhibitors across 65,000m<sup>2</sup>.
- Divided between, vineyard, bottling/packaging, winemaking and innovation awards.
- Draws industry members from over 70 wine producing countries, held over three days including seminars and talks from industry leaders.



# Viticulture - Harvesting

- All top suppliers on show, and all heading towards on board sorting/destemming and using optics for a cleaner sample.
- Self propelled with on board hoppers for most models eliminating chaser bin which is a huge advantage.
- Ero grapeliner, Braud optigrape and Pellenc Selectiv.



# Viticulture - Cultivation

- Not one undervine herbicide unit on display.
- Undervine cultivation is king in Europe, excellent machinery capable of any task.
- Braun LUV system - blade, rotary hoe, flail and top mounted cane cutter.



# Viticulture - Spraying

- Most companies heading towards recycle spray technology for cost saving and efficiency.
- Useful for Australia with Emblem now registered for trunk disease.
- Increase in virus spread by mealybug and scale gives a viable option of treatment.
- Bertoni, FMR, Gregoire all offering good examples with differing specs.



# Viticulture - Operations

- AVA disbudding machine. Allows mechanical disbudding without damage to drip line.
- Ebox 4x4, battery powered all terrain, great option to diesel/petrol powered models.
- Pellenc spectron – measures sugar, acid, anthocyanin and water content. Great for grape maturity analysis on the go.
- <https://www.youtube.com/watch?v=W-izzj1TMv8>



# MEA – Plexus with “Green Brain” application

- Ability to measure soil tension, % moisture, soil and air temperature and plot rainfall data all to the one central hub.
- Data is stored in the cloud and accessed on a web based application on a tablet or smartphone.
- All data is continuously logged and does not require physical readings.
- A fantastic tool to take the guess work out of irrigation scheduling.



# Green Brain web application

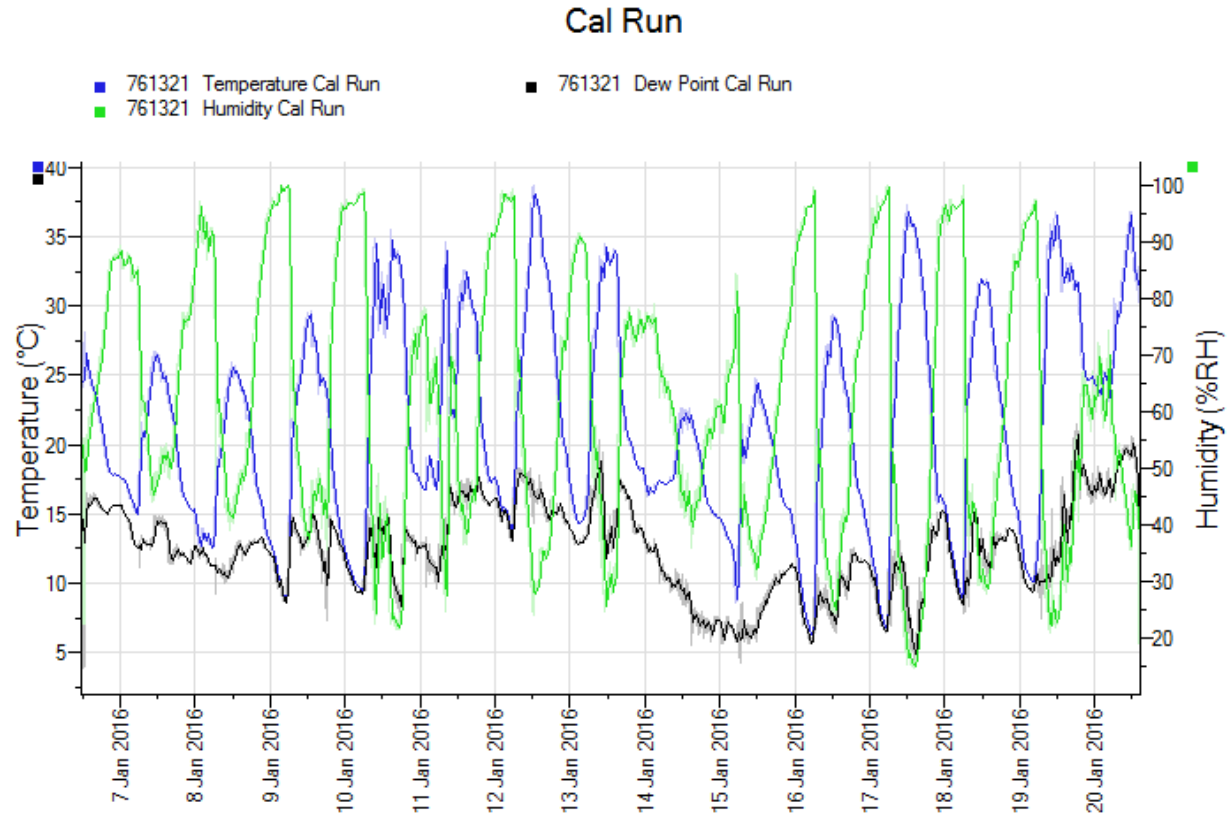


# “Tiny Tag” Temperature and Humidity sensors

- Tiny tag sensors were placed inside the canopy at bunch zone level to measure humidity and temperature in the fruit zone.
- A great way to observe bunch and canopy temperature rather than being guided by ambient temperature alone.



# Tiny Tag data presentation

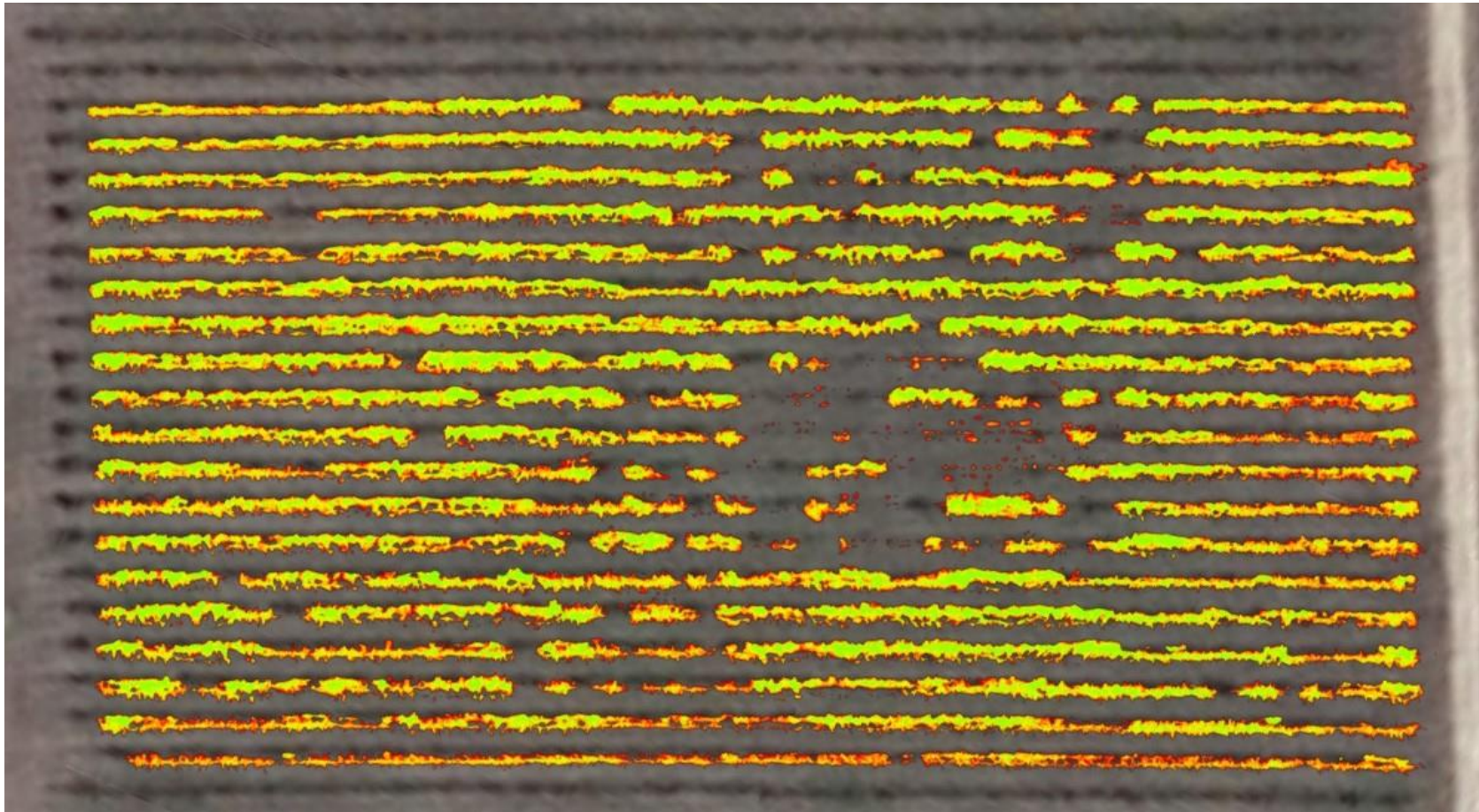


# RTK eBee aerial survey – NDVI and Thermal Imaging

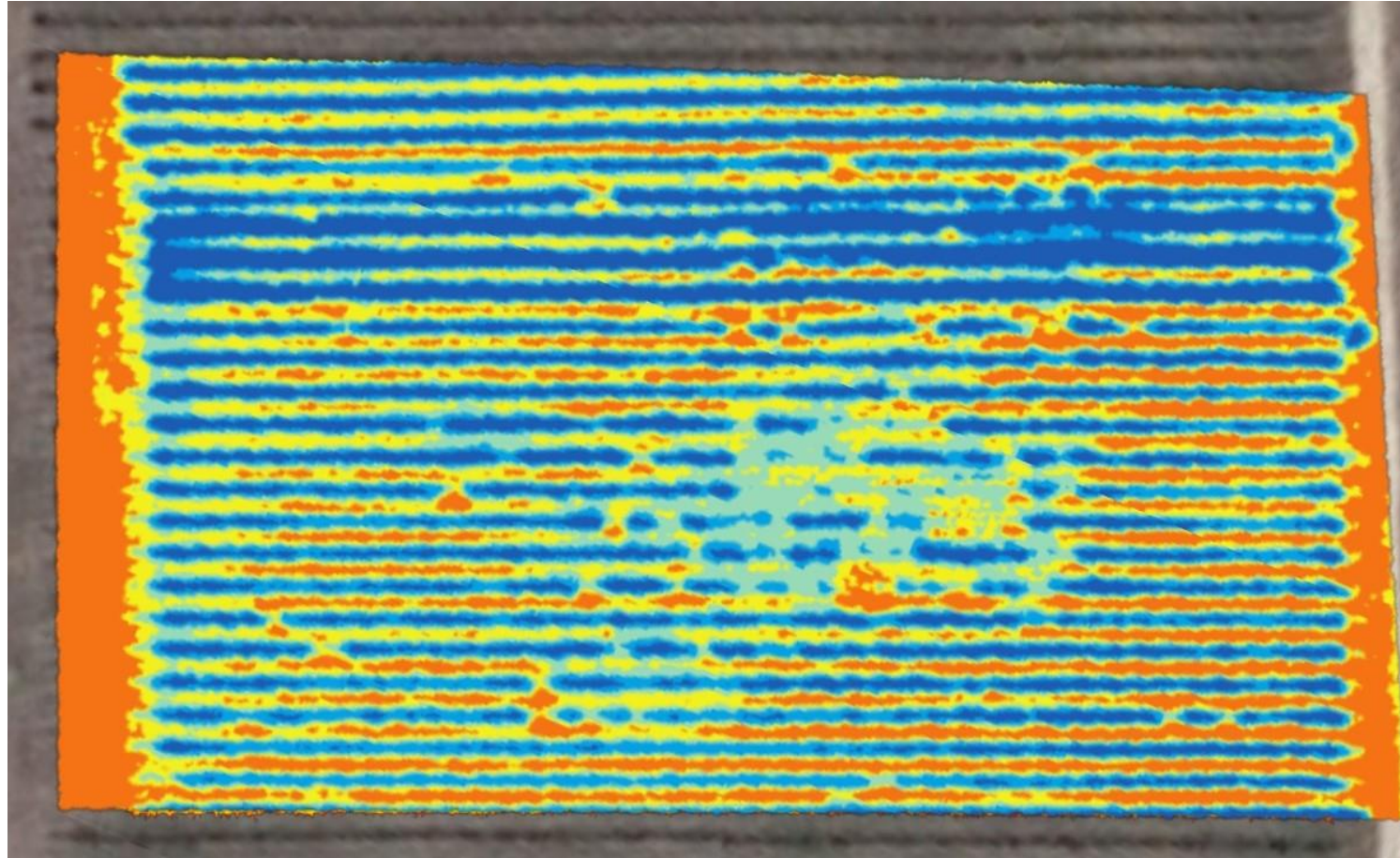
- Service provided by Southern Precision Ag. Fully insured and hold a current unmanned operators certificate.
- Completely guided by GPS, the flyover gives information on canopy temperature and vegetative area.



# NDVI – Normalized Difference Vegetation Index



# Thermal Imaging



# Take home messages

- All suppliers from Vineyard to bottle are looking at ways of reducing handling and refining the products. Attention to making premium products.
- Vineyards – mechanizing inputs and refining sample through harvesting, cost saving and lowering environmental impacts.
- Exciting technology still emerging which will further refine vineyard to winery operations.

