Vinitech-Sifel

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

BOWMAN VITICULTURE

Pursuing growth with next generation energy

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 65,000m2.
- 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.

BOWMAN VITICULTURE
Pursuing growth with next generation energy
www.bowmanviticulture.com.au

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.

BOWMAN VITICULTURE

Pursuing growth with next generation energy

www.bowmanviticulture.com.au

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.

BOWMAN VITICULTURE

Pursuing growth with next generation energy

www.bowmanviticulture.com.au

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.

BOWMAN
VITICULTURE

Pursuing growth with next generation energy

www.bowmanviticulture.com.au

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

BOWMAN VITICULTURE

Pursuing growth with next generation energy

www.bowmanviticulture.com.au

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.

BOWMAN VITICULTURE

Pursuing growth with next generation energy

www.bowmanviticulture.com.au

Green Brain web application

BOWMAN VITICULTURE

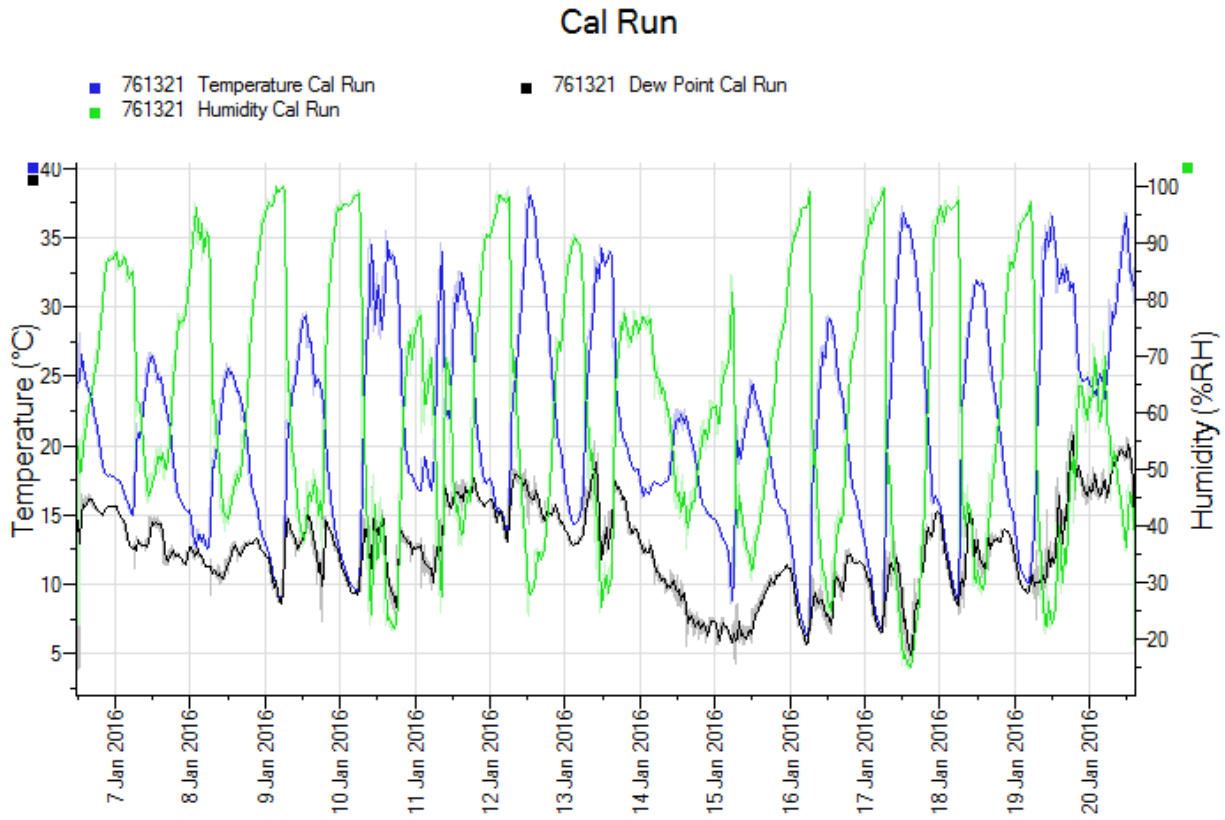
Pursuing growth with next generation energy

www.bowmanviticulture.com.au

“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



BOWMAN VITICULTURE

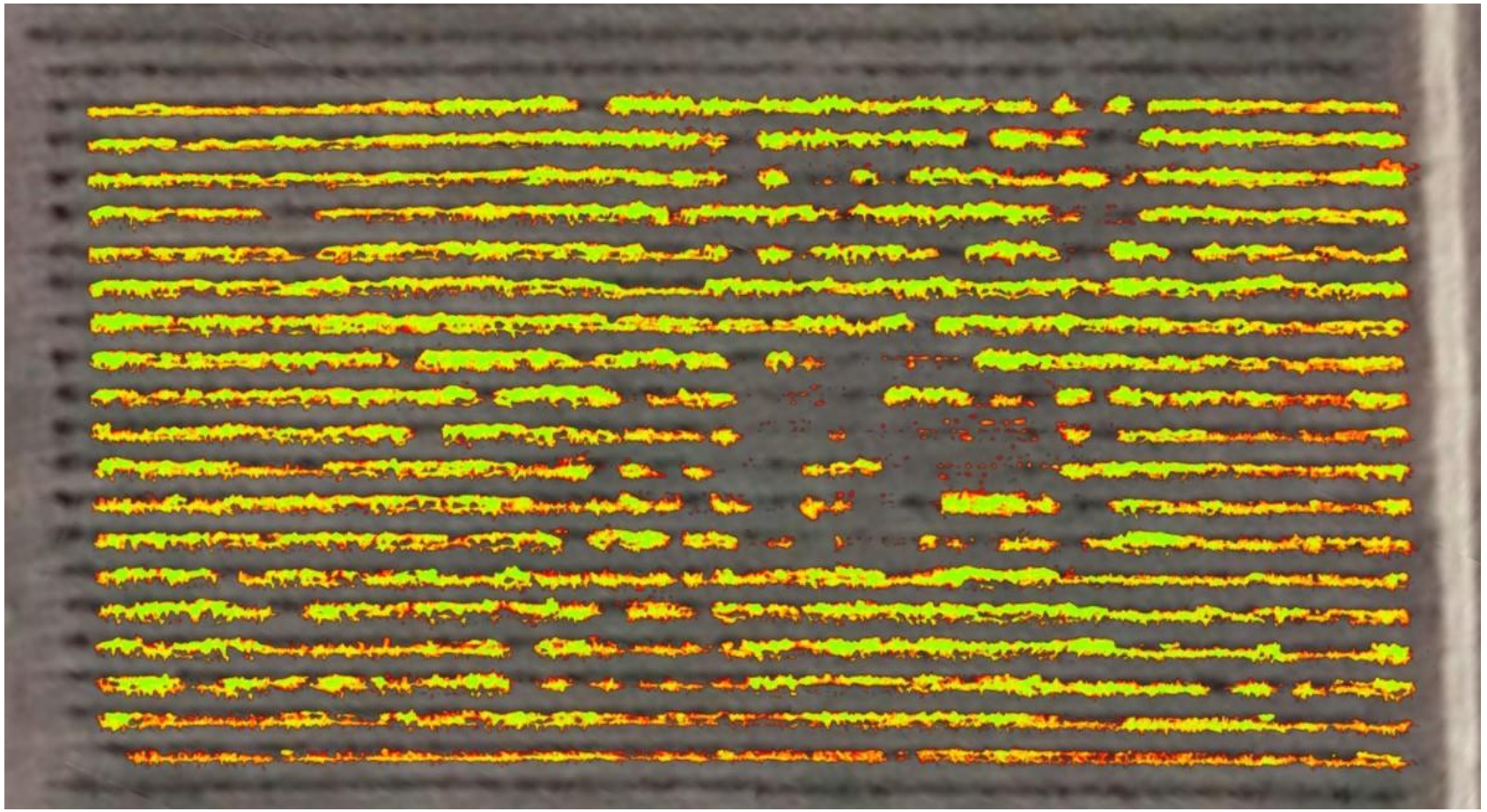
Pursuing growth with next generation energy

www.bowmanviticulture.com.au

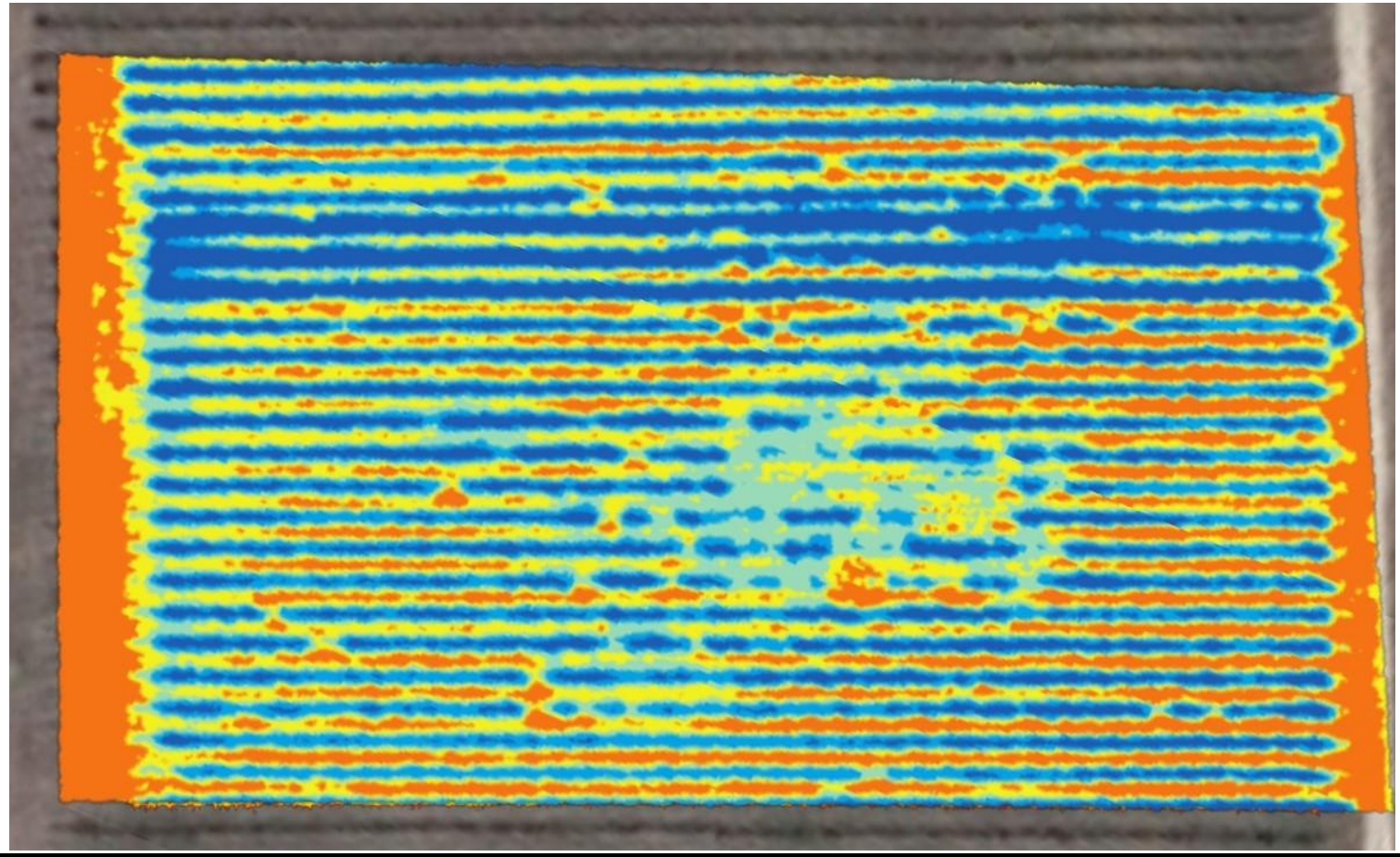
RTK eBee aerial survey – NDVI and Thermal Imaging

- 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.