

INNOVATION+QUALITY

# Nick Goldschmidt

- Winemaker of Goldschmidt Vineyards
- Grower and Producer in four countries
- Wine consultant in Canada, New Zealand, Australia, Chile, Argentina, Italy and USA
- Operating Partner in Alpine Engineering Solutions



# Nick Goldschmidt

- X corporate junky.
- Credit to them for the ideas I have stolen.
- Now implementing some.



# Alpine Engineering Solutions

- Small company focused on first to market ideas.
- Ideas thus far have all been developed outside of the USA.
- The goal is to move production to the USA.  
(looking for working partners)
- Route to market varies by product.



# Today I will discuss

1. Small Micro ox devise
2. Tannin Polymerizer
3. Aromatic recovery
4. De-Labeler
5. Sleeve remover
6. Other



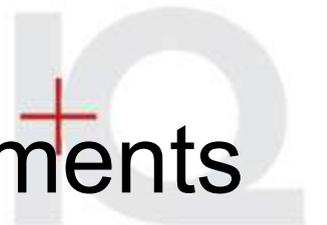
Due to the sensitivity and development stages of these machines and future ones. Please contact me directly on:

[Nick@Goldschmidtvineyards.com](mailto:Nick@Goldschmidtvineyards.com)



# 1. Micro Ox

- We first used Micro ox in 1983 in Mendoza. The issue then was the size of the bubbles
- Current issues are
  - Lots of oxygen in the hose and the wine surrounding the outlet
  - Large infrastructure to be set in place
  - Inability to move between wineries.
  - Fixed structures are hard to keep clean in wineries.
  - Large cylinders in tight often difficult working environments



# New Micro Box

- I am attracted to this new unit due to
  - The size - Light and movable
  - A lack of hard fixtures. I am a small producer but make wine in seven wineries. Hence I wanted to micro different wines in different wineries
  - The Membranes move within the tank and so oxygen is distributed more quickly throughout the tank
  - Easy to control via wifi
  - Cheap and effective



# New Micro Box Current status

- First one is at my house
- Available for purchase



## 2. Tannin Polymerizer

- To shorten the maturation time of the wine in the barrel or tank after the fermentation process, as well as the optimization of the tannin profile.
- The qualitative peak is reached when the polymerization and condensation process is complete.
- A qualitative degradation process takes place thereafter.



# Tannin Polymerizer Disadvantages

- The winemaker has to make a decision
- Once the decision is made the tannins can not be put back
- Speed of the machine is fairly slow and so we are looking at larger options.
- Does not help with a wine that lacks fruit.

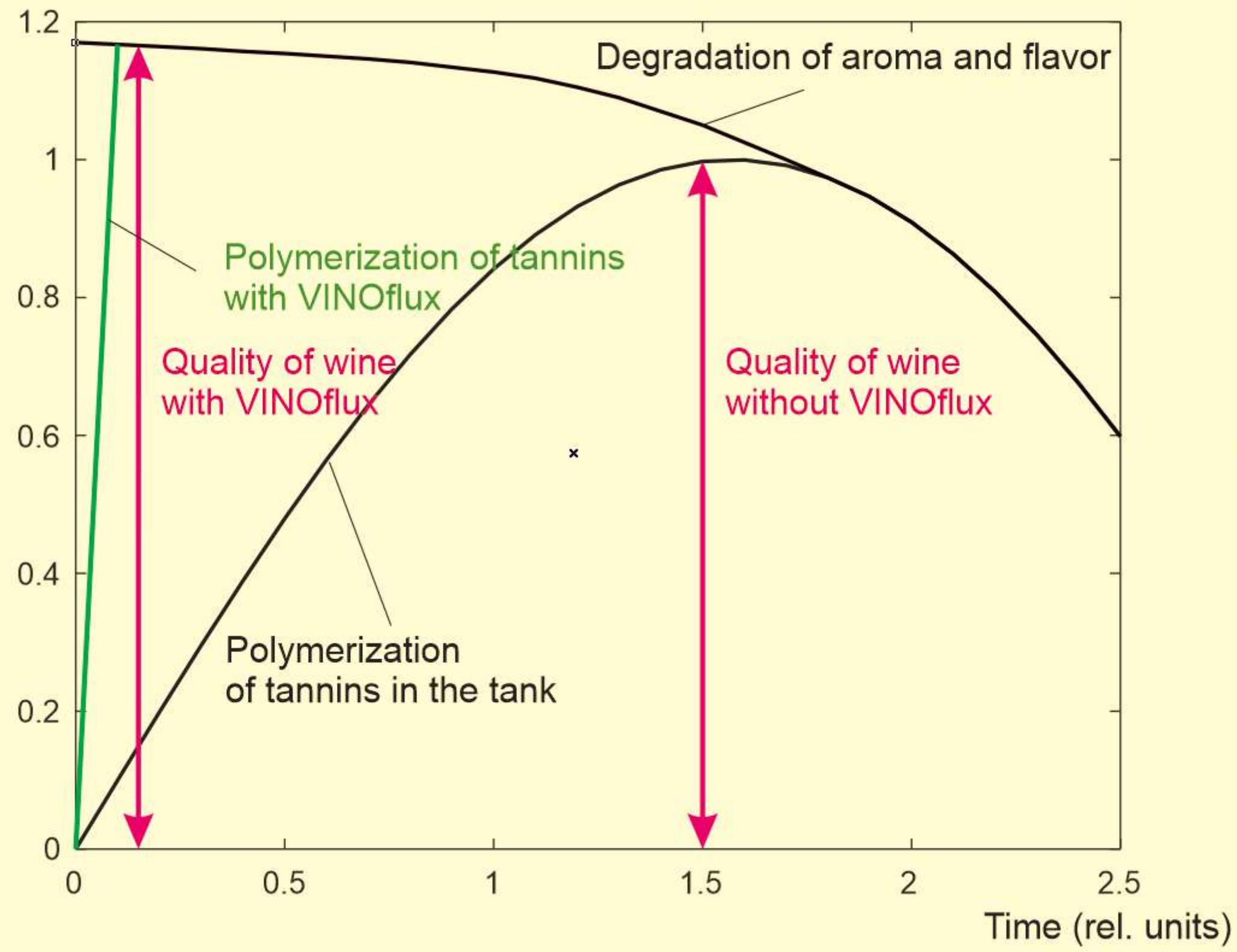


# Tannin Polymerizer advantages

- Our machine accelerates the polymerization and condensation process and thus the maturation.
- The wine can then go through bottling and marketing process sooner.
- The wine reaches a higher quality level through the our treatment sooner than with the barrel or tank maturation.
- Even after two years in barrel this polymerization has an amazing impact.
- Clear preferences for treated wines



Quality (rel. units)





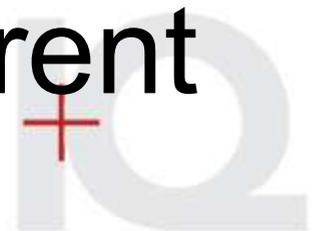
# Tannin Polymerizer Current status

- 12 machines – My house, Australia Spain and Germany
- Tried in Napa Valley on \$100 wines with great success. Six wineries using it on a regular basis
- Tried in Paso with even more success.
- Incredibly useful on wines with dry tannins but still with fruit.
- Larger machines are in development.



# 3. Aroma Recovery

- Have been working on this on and off since 1986 with two wine companies.
- Ferment gives CO<sub>2</sub>, Water vapor, Aromatics and Ethanol
- Issue was how to separate out the water effectively
- Options were how to collect aromas at different stages of the ferment



# Aroma Recovery Thoughts

- Can be collected from Beer, Cider and Wine industries.
- Collection of the aromatics that can be added back to the same wine, different wines.
- Help neutral wines become complex.
- Very very concentrated aromas – tiny additions
- Adding perfumes to neutral spirits.
- Use of the aromatics in perfume and other food industries.  
Showed at a food show in Brazil.
- Reduction in pollutants which has tax implications

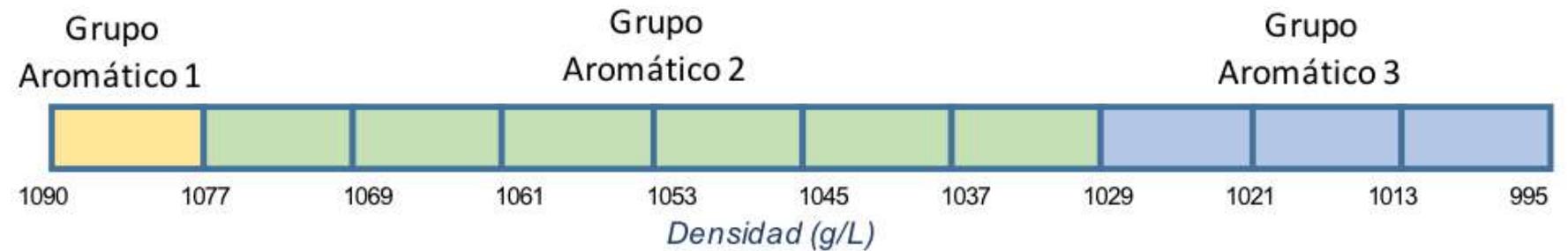
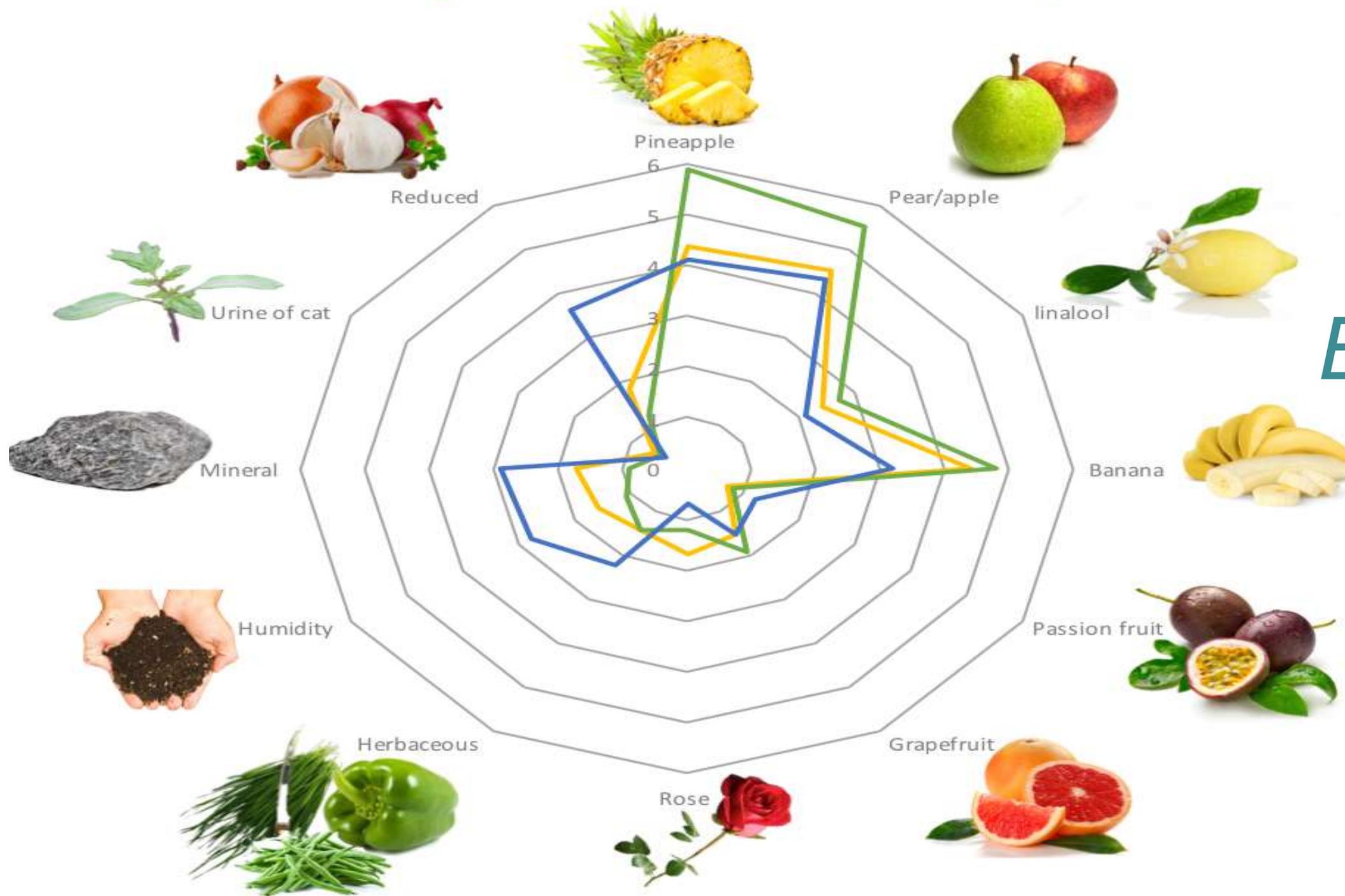


# Aroma Recovery Thoughts

- The first three days of the ferment gives very different aromas to the lag phase
- Fermenting at different temperatures gives different aromas. Ferment hot we get more thiols and cooler more mineral.
- Fermenting hot means we can turn tanks faster

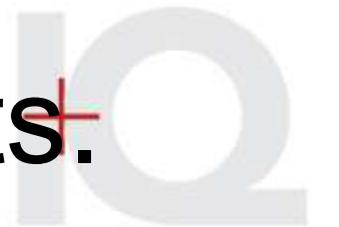


# Sauvignon blanc Essential Oil



# Aroma Recovery Current status

- Two small machines – My house and Spain.
- Machines are currently small single tank units for collecting the perfume.
- Trialing larger units for complete winery capture.
- Seeking TTB Approval.
- Looking for uses for the perfume – Vodka, neutral wines and beers, other food products.



# Experimentation of a larger winery unit at a consulting clients winery “not in California”



- Single tank unit from “my house” being used in a trail here in California at one of my consulting clients wineries



# 4. De – Labeler

- This has been a very tricky project to say the least!!!!!!!
- Idea was for bottling line start ups and removing crooked labels
- Then calls – “real news not fake”
  - Hey we have an export order and we only need 10 cases to take off labels
  - Ops we miss spelt Chardonnay on 2,000 cases
  - Marketing wants a new label







# De - Label

- Yes I have one at my house
- Each bottle line needs one
- Have sold 250 units in Australia and New Zealand.
- Current module is great for straight sided bottles
- Works on self adhesive and glue
- New module for tapered is in development



# 5. Screw Cap Sleeve remover

- Issue the need to open screw caps during bottling
  - To check torque
  - To check fill height
- Now what do you do with the bottle? Tip out the wine and through the bottle away?



# Screw Cap Sleeve remover



Over 400 sold in New Zealand and  
Australia



# 6. Next project

- Working on new ways to increase oak concentration in entry level wines



Thank you for your attention.

Please contact me below if interested in trialing  
any of the products.

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