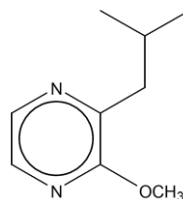
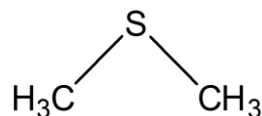
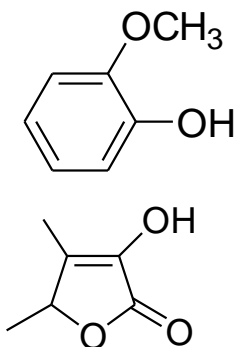
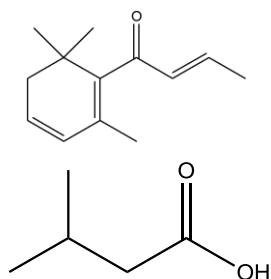


## Key wine aroma compounds: their origin, aroma properties and how to dial them up or down



Time	Presentation Title	Presenter
14:00 – 14:10	Welcome and Introduction	Leigh Francis
14:10 – 14:40	Varietal thiols and green characters	Natoiya Lloyd
14:40 – 15:10	Fermentation and monoterpene derived characters	Leigh Francis
15:10 – 15:35	Eucalyptol	Dimitra Capone
15:35 – 16:10	Pepper	Leigh Francis
16:10 – 16:35	Afternoon Tea	
16:35 – 17:05	Reductive and oxidised characters	Christine Mayr
17:05 – 17:35	Norisoprenoids – TDN and Methoxypyrazines	Assoc Prof. Gavin Sacks
17:35 – 18:00	Faults and taints	Cory Black
18:00	Close	

# Workshop aims



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- ❖ Become familiar with common wine compounds – their aroma and how you would describe them
- ❖ Origin and formation, latest research outcomes



# The sense of smell



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- ❖ volatile compounds that are detected by the olfactory bulb
  - sniffing a wine
  - retronasal: odours in mouth
  
- ❖ flavour: total sensations from smell, taste and touch
  - Taste: sweet, salt, acid, bitter, umami
  - Touch: astringency, heat, weight, viscosity, irritation



# Assessing the importance of compounds to wine flavour



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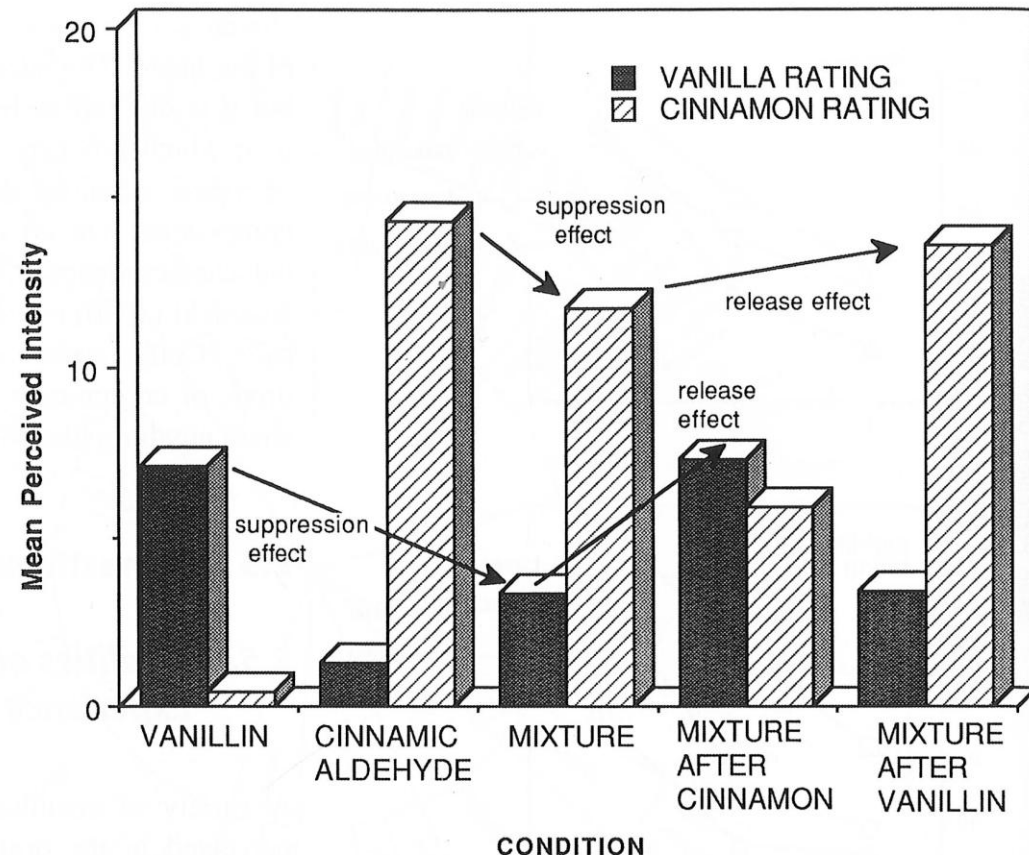
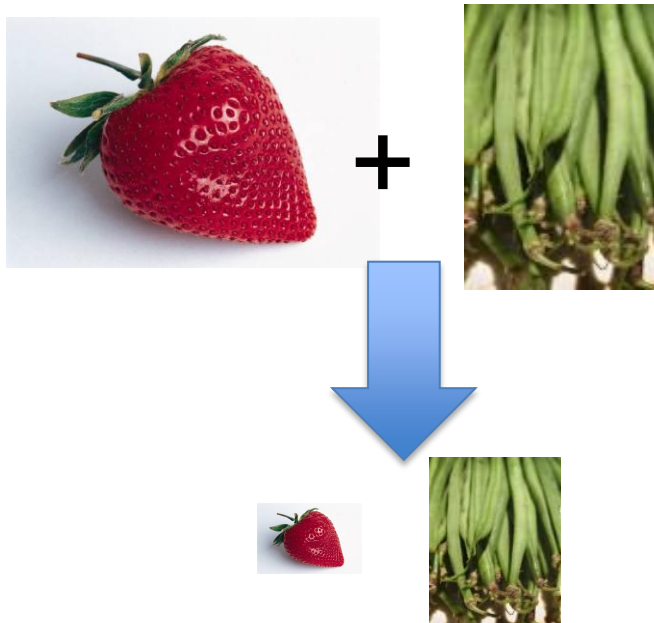
- ❖ Up to 1400 volatile compounds implicated
- ❖ Concentration: low ng/L to g/L
- ❖ Aroma detection threshold
  - also ng/L to g/L
  - Threshold is an average: individuals can have much lower threshold than the panel average
- ❖ Concentration relative to threshold **Odour activity value**





# Flavour is all about balance

- ❖ Flavour compounds strongly interact, usually suppressing each other
- ❖ Can be additive effects



# Acknowledgements



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- ❖ This workshop was financially supported by Australia's grapegrowers and winemakers through their investment body the Grape and Wine Research and Development Corporation, with matching funds from the Australian Government

