

Parallel Production in an Established Vineyard: Lessons from an Organic Vineyard





AIM

Investigate organics and long term sustainability
against pre-existing sustainable systems



Objectives

- Maintain or increase yield & wine quality
- Determine whether the modified management practices were influencing our soil carbon, biota, water infiltration and application
- We need to determine the variables within our cost of production
- Define whether chemical application could be reduced







Pewsey Vale
Vineyard
Eden Valley
Prima Riesling
Released year
of vintage,
off dry style



Pewsey Vale
Vineyard
Eden Valley
Riesling
Released year
of vintage,
dry style



Pewsey Vale
Vineyard
The Contours
Riesling
Released 5 years
after vintage, bottle
aged, dry style

Yield Differentials

	Pre-Organic	Organic	Conventional
Average Yields Tonnes/Ha	5.57	5.55	5.39



Operating cost differentials

Operation	Product	conventional \$/ha	organic \$/ha
Fungicide Spraying		\$325	\$455
Herbicide	glufonisate ammonium @ 5L/Ha	\$76.25	\$0
	pine oil @ 105L/Ha	\$0	\$916
Undervine Hand Hoe		\$0	\$900
Nitrogen Input	Synthetic foliar (9.9:4.3:6.2) @2L/Ha	\$7.70	
	Organic foliar (14% w/v) @2.5L/Ha		\$23.53
Insecticide	Indoxacarb @170g/ha	\$43.35	
	Bacillus Thuringiensis @2kg/ha		\$88
Straw Spreading	straw rolls	\$1,575	\$1,575
	outlay over 3 years	\$525	\$525
Fungicides	Potassium bicarbonate		\$31.54
	Spiroxamine	\$9.11	
	Sulphur	\$7.07	\$7.07
	Copper hydroxide A		\$15.16
	Copper hydroxide B		\$12.40
	copper oxychloride	\$10.80	
Certification	Audit/ Administration		\$400
Total		\$2,579.28	\$4,948.70
Additional Equipment Required	BD spray unit		
	BD flowform		
	fungicide unit (second hand)		

Successes & Challenges

- Pest and Disease
- Nutrition





Comparisons in parallel production

- Measuring soil nutrition, carbon and microbial activity
- N₂O emissions
- Yield
- Grape quality
- Soil moisture and temperature
- Visual assessment



Summary

- Organic production needs to be tied to a definitive brand
- Increased monitoring of Downy Mildew and LBAM especially in high pressure years is critically important
- Vineyard costs can be up to 30-50% higher than conventional farming
- Certification is key element to ensure standards, and collaboration within the internal supply chain



<http://y1849.yalumba.info/prj/Viticulture/Shared%20Documents/Research%20and%20Innovation/Time%20Lapse%20Video%20of%20Pewsey%20Vale%20Vines.wmv>

