

Botrytis Project Trial Results

Producer-Led Trials

Method available here:



Why

A reliable supply of high-quality fruit from Tasmania is needed to sustain and grow premium wine brands.

Effective management of botrytis bunch rot (BBR) means more high-value wines with fewer costs; i.e., less crop and juice loss, labour and processing costs.

Effective BBR management depends on selecting and tailoring the right management tools to suit the production site, seasonal conditions, operational budgets and the end use of fruit.

How

We guided 13 wine businesses through the [Producer-Led Trials](#) approach whereby they designed and completed 23 trials of various cultural, chemical and biological control tactics for the management of BBR and/or powdery mildew as a BBR risk factor.

Trials were conducted in 2023-24 and 2024-25 across a diversity of business types, vineyard sizes and grape varieties in the North-West, Tamar Valley, East Coast, Coal and Huon Valley regions of Tasmania.

Trials were designed to support a business-specific decision and production context. Individual trial results may not be broadly applicable.

KEY FINDINGS

- The weather in both seasons was relatively benign for BBR development. Even so, fruit in 10 of 23 trials had BBR severities likely to impact grape yield and quality.
- There was a diversity of findings across a broad range of trial topics and crop inputs (Figure 1).
- Various techniques for leaf removal ('plucking') in 11 trials demonstrated benefits for BBR management in some trials, little or no gain in others, or benefits in one season and little gain in another.
- Double-sided leaf removal by machine in mid-November in Riesling roughly halved mean BBR severity relative to no leaf removal in Trial 13 (5% and 10–12% mean BBR severity per trial strip, with and without leaf removal).
- The consequence of omitting a synthetic fungicide during flowering in Riesling in Trial 6 was clear: 0.6% and 3.2% BBR severity per trial strip, with and without spraying.
- The benefit of adding or omitting a biological product appeared to depend on the extent of BBR development in the trial.
- Results were often similar for fungicide product substitutions.



13 wine businesses
23 trials
2023-24 and 2024-25

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Trial number	Leaf removal	Spray technique	Fungicide substitution	Fungicide omission	Fungicide addition	Spray timing	Adjuvant omission	Modify spray program	Target disease	Highest disease severity
1		Δ	Δ						BBR	≥
2		Δ	Δ						BBR	≥
3		Δ							BBR	≥
4		ND							BBR	0
5		Δ			Δ				BBR	<
6					Δ				BBR	≥
7					ND		ND		BBR	0
8					NR				BBR	≥
9				Sim		Sim			BBR	<
10				ND					PM	0
11								ND	PM	0
12		Δ							BBR	<
13		Δ	Δ						BBR	≥
14		Δ							BBR	≥
15		Δ							BBR	<
16		Sim							BBR	≥
17		Δ		Δ					BBR	≥
18						Δ			BBR	≥
19									BBR	<
20				Sim	ND	Sim			PM, BBR	0, <
21				Sim					PM	<
22								ND	PM	0
23				Sim					PM	≥

Figure 1. Trial topics for botrytis bunch rot (BBR) and powdery mildew (PM) selected by participating wine businesses. Trials 1–11 were conducted in 2023–24 and Trials 12–23 were conducted in 2024–25. Trials sharing the same colour were conducted at the same vineyard. If there were two trials in a vineyard in the same season, then these were different grape varieties. Each trial had one or two test treatments, except Trial 20 which had three treatments for two disease targets. Symbol key: Δ = the participant noted a practical difference in the magnitude of disease severities at different locations within trial strips being compared; ND = no difference among trial strips because disease symptoms were absent on sampled grape bunches; Sim = disease severities among trial strips were similar; NR = results not reported due to changes in the participating business; BBR = botrytis bunch rot; PM = powdery mildew; ≥ or < means that the highest average BBR or PM severity in one or more trial strips was ≥ 1.5% or < 1.5%; 0 = disease symptoms were absent on sampled grape bunches.

Case studies

We applied qualitative research methods to develop participant case studies. The Attachment provides a high-level summary of each participant's trial results and some commentary on production context and commercial outcomes.

Knowledge sharing

Post-season workshops provided valuable time for producers to share and reflect on trial results, current practices, and future trial designs. Participants noted the benefits of learning together and gaining awareness of others' vineyard practices.

Further information

The following publication is an evaluation of the key features for success of the producer-led trials approach.

Evans, K.J. and Higgins, V. 2026. Toward systemic scaling of producer-led trials: evidence from a structured, adaptive and supported approach in vineyards. *Australian Journal of Grape and Wine Research*, in press.

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