

UNIVERSITY of TASMANIA —



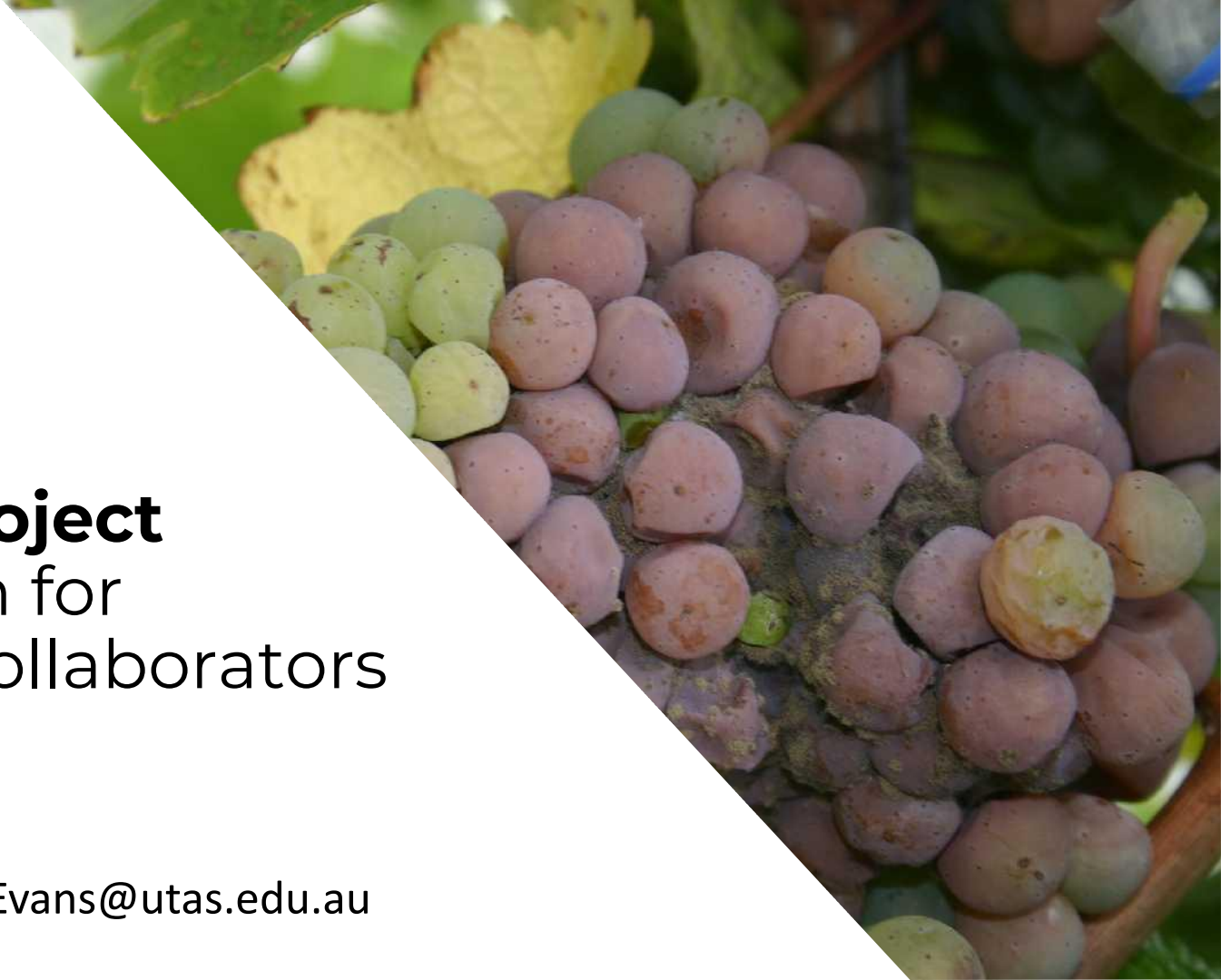
Tasmanian Institute of Agriculture

Botrytis Project

Information for Potential Collaborators

August 2023

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Project Funding

The Tasmanian Institute of Agriculture (TIA) at the University of Tasmania has received a grant from the **Tasmanian Government's Agricultural Develop Fund** to deliver this project.

Collaborators

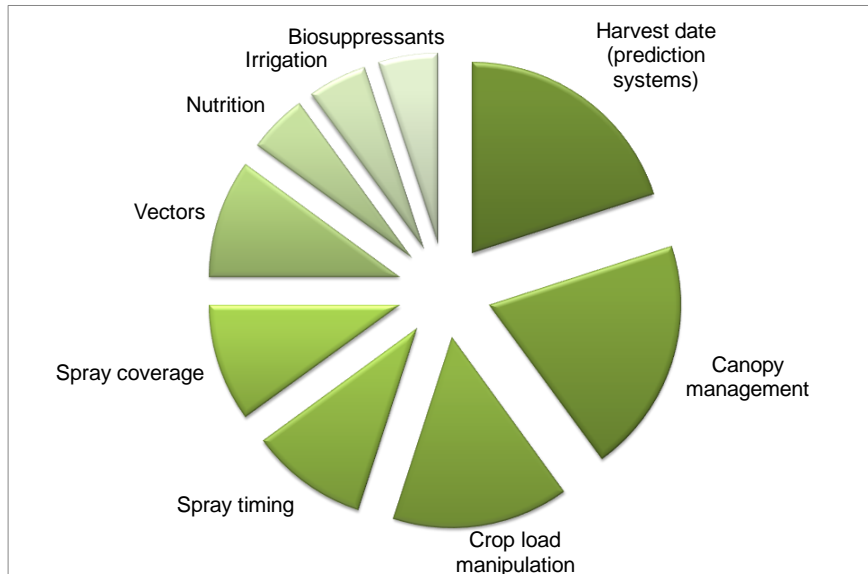
- Wine Tasmania
- Nufarm and other providers TBD
- Australian Wine Research Institute
- **Participating producers (today's focus)**

Today

- What's the problem and opportunity?
 - About the project – objectives, activities/methods, desired outcomes
 - Why be a trial collaborator?
 - What's involved in being a trial collaborator?
 - Opportunity to answer your questions
 - Expression of Interest process
 - Getting started...
- 

Problem and Opportunity

- Botrytis bunch rot a major production constraint
- Gaps in knowledge and/or understanding of what to do in the vineyard
- Opportunity to test and tailor practices/solutions to each site
 - Botrytis management: 'One size does not fit all'



Project objectives and outcome

1. Do trials to produce useful information relevant to any given site
 - To directly support decisions about botrytis management
2. Share results and changes to botrytis management for broader learning

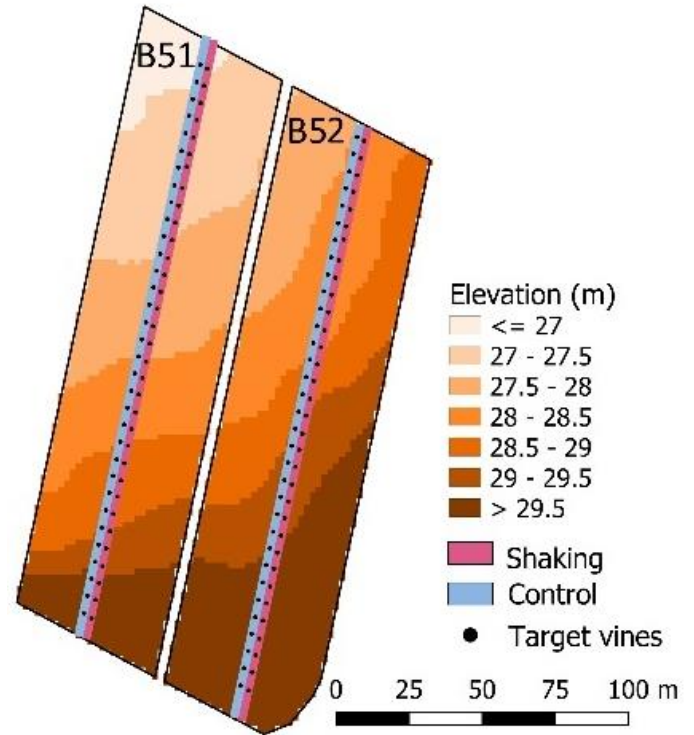
Participating producers and/or service providers have the means to evaluate and decide which botrytis management practices to adopt at a given site/s

Two growing seasons: 23/24 and 24/25

Ideally, at least 10 trial collaborators across TAS and a diversity of wine businesses

Strip trial method: simple but rigorous

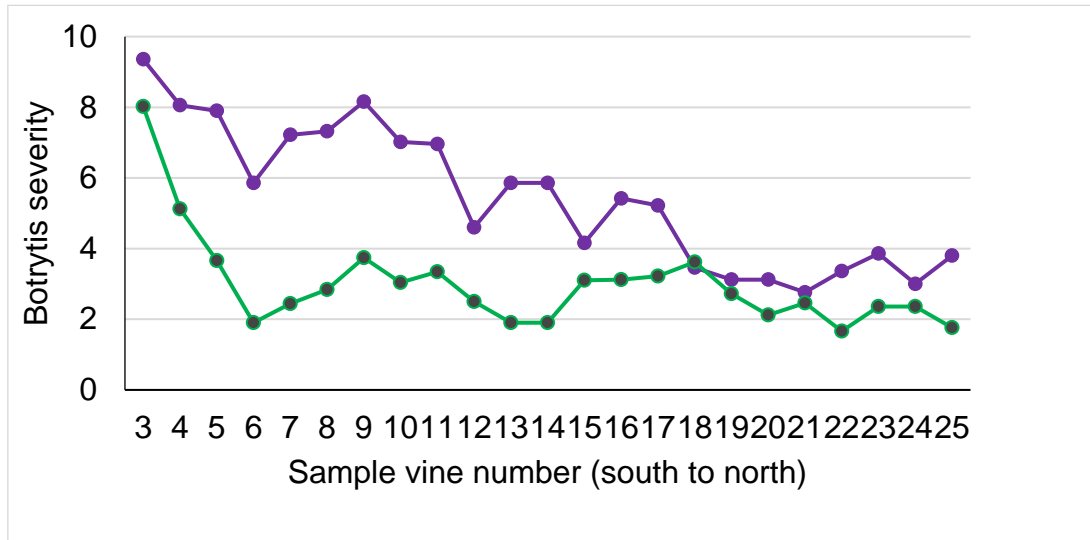
- 'Treatments' applied with commercial equipment
- 'Control' strip is current practice
- 'Strip' purposefully captures maximum spatial variability in botrytis severity (treatment response)



Strip trial uses 'moving window average'

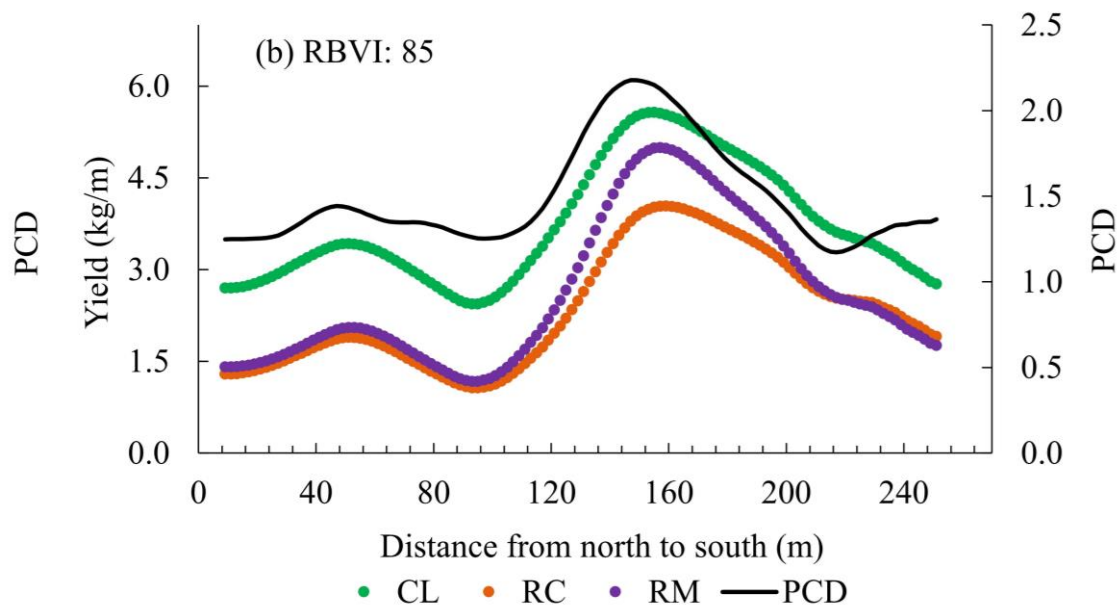


Keep moving the 'window' to the other end. An example of resulting graph:



Trial can be more 'technical' if willing/capable.

- 3 mid-row management treatments – each applied to four mid-rows
- Each window is a pair of 10 sample points = 20 m of row



- CL > RM > RC where PCD > 1.4 (about 20% of the block)
- RM and RC had similar yields and lower than CL at PCDs < 1.4

Panten *et al.* (2010) applied in Song *et al.* (2022)

Q&A



What does it involve?

- Participate in meetings to select ‘test’ treatments and view/discuss results
 - You decided what to share with others
- Liaise with the project team during the trial
- We serve as the ‘help desk – assistance will be on an as-needs basis
- You decide what you can and can’t do
- Receive reminders to record information about the trial and supply it to the project team
- (Optional) forums to share information and insights
- Be interviewed at least once by University of Tasmania researchers
 - We will evaluate the project process and outcomes

Early Season Group Meetings

Dates to be confirmed:

- North: Thursday 28th September, St Matthias Vineyard, Tamar Valley
- East Coast: Monday 2nd October
- South: 4th or 5th October (Wed or Thurs)

Participants will develop their trial plan and consider how it will be implemented.

- Re-cap on the basics of botrytis bunch rot
- Help you develop your trial idea and seek feedback from others
- 'Botrytis checklist' to help reveal trial options suited to your context
- Discuss trial conduct: who will do what?
- Discuss how we might communicate with each other

Botrytis Checklist

concise version

WINTER	Identify issues from last season Plan spray program for different weather scenarios Improve drainage and air flow? Pull vines in on-going problem patches?
BUD BURST TO PRE-FLOWERING	Yield estimation: shoot thin? Sprayer calibration
BLOOM –FRUIT SET	Spraying: Technique, Timing (monitor for bloom), Product? Weather for latent infection? Tissue damage? Trash in clusters?
PRE-BUNCH CLOSURE	Spraying: Technique/Product? Leaf removal? Berry damage? Weather?
VERAISON	Spraying: Technique/Product? Cluster thinning (congestion) Berry damage? Weather outlook?
PRE-HARVEST - HARVEST	Botrytis symptoms? Spraying?? Berry splits? Vectors? Insect damage? Drop mouldy bunches? (Train pickers) Harvest early or harvest selectively?

Benefits of being a trial collaborator

- You decide what to try – with our help, suggestions and/or review
- See the results of your own trials and those of other participants
- Results directly support your decisions about what to try further or change
- Opportunity to learn more and develop trial skills through group activities
- Add participation to your cv for future job roles (demonstrate leadership)

Q&A



Putting research into practice!

Bramley RGV, Song X, Colaco AF, Evans KJ, Cook SE (2022) Did someone say “farmer-centric”? Digital tools for spatially distributed on-farm experimentation. *Agronomy for Sustainable Development*, 42 Article 105.

Panten K, Bramley RGV, Lark RM, Bishop TFA (2010) Enhancing the value of field experimentation through whole-of-block designs. *Precis Agric* 11:198–213.

Song X, Bramley RGV, Evans KJ (2022) A method to position a simple strip trial to improve trial efficiency and maximise the value of vineyard variability for decision-making. *OENO One*, submitted.

Song X, Evans KJ, Kumar S, Bramley RGV (2021) Experimentation during wine grape production in Australia: motivations, approaches and opportunities for change. *Australian J of Grape and Wine Research* 28 (1): 131-145.

Song X, Evans KJ, Bramley RGV, Kumar, S (2022) Factors influencing intention to apply spatial approaches to on-farm experimentation: insights from the Australian winegrape sector. *Agronomy for Sustainable Development*, 42 Article 96.

'Biologicals' Trial – Grower Response

- Aspired to further testing of 'biologicals' after viewing trial results
- Initially concerned about resources needed, but fears allayed during process

“We know we have a process that we can implement without too many dramas in the field, that the staff can go and apply, as an example, without major dramas. And let me tell you, there can be dramas...”

- Would try the process again

“would be keen to do more of it if it was possible, not necessarily just on this topic, but on any other topic that comes up that benefits both parties”.

'Biologicals' Trial – Input Supplier Response

- Consultant had raised awareness of limitations of using an average for the whole row

“I already think that I need to talk to my colleague about incorporating this moving box assessment in the way she assesses her trials as a way to make it more weighty”

How to Express Interest

- Submit an **Expression of Interest** by completing the online form at the project website – see calendar invite or the first post in the meeting ‘chat’
- Contact Kathy (Katherine.Evans@utas.edu.au) if you would like us to complete the form with you
- If we think your Eoi is unsuitable then we will contact you to discuss the matter

Summary

- You are best placed to drive the trial and gain the answers you seek
- We will learn:
 - what is valued (or not) about this approach to doing trials
 - who needs to be involved and what role should they play
 - what knowledge and skills are needed to trial effectively
 - how we can do more of what people value after the project finishes



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Thank you

Spatial variability: trial position matters

