

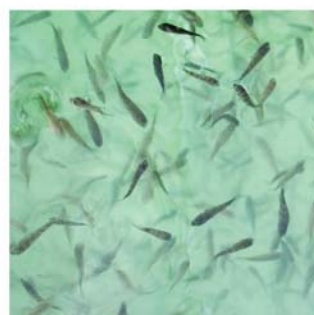
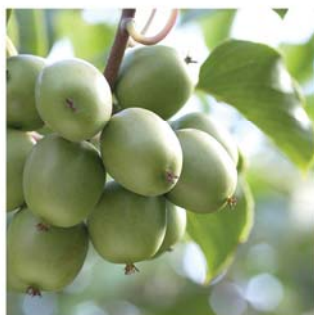
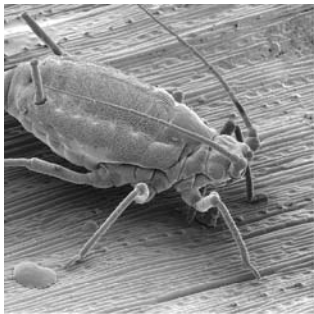
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## Industry Seminars and Workshops

Agnew R

August 2013

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**Report for:**  
Marlborough Research Centre Trust

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#### **Report approved by:**

Rob Agnew  
Scientist/Researcher, Viticulture & Oenology  
Date: August 2013

Damian Martin  
Science Group Leader, Viticulture & Oenology  
Date: August 2013

This report has been prepared by The New Zealand Institute for Plant & Food Research Limited (Plant & Food Research).  
Head Office: 120 Mt Albert Road, Sandringham, Auckland 1025, New Zealand, Tel: +64 9 925 7000, Fax: +64 9 925 7001.  
[www.plantandfood.co.nz](http://www.plantandfood.co.nz)

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## Executive summary

### Industry Seminars and Workshops

Agnew R  
Plant & Food Research, Marlborough

August 2013

### Seminars delivered at the Marlborough Research Centre between July 2012 and June 2013

In the year from 1 July 2012 to 30 June 2013, six seminars were held at the Marlborough Research Centre as part of the contract between The New Zealand Institute for Plant & Food Research Limited and the Marlborough Research Centre Trust. Seminars were advertised through the Wine Marlborough newsletter, which is sent to approximately 1000 recipients. Seminars that targeted a wider audience than just the wine industry were also advertised through the Marlborough Research Centre email distribution lists and in the *Marlborough Express* newspaper.

PDF copies of all the MS® PowerPoint talks presented at the seminars can be downloaded from the Marlborough Research Centre website <http://www.mrc.org.nz/>

### For further information please contact:

Rob Agnew  
The New Zealand Institute for Plant & Food Research Ltd  
Plant & Food Research Marlborough  
Marlborough Wine Research Centre  
PO Box 845  
Blenheim 7240  
NEW ZEALAND  
Tel: +64-3-984 4310  
Fax: +64-3-984 4311  
Email: [rob.agnew@plantandfood.co.nz](mailto:rob.agnew@plantandfood.co.nz)  
DDI: +64-3-984 4320



## 1 Botrytis Models and Monitoring – 11 July 2012

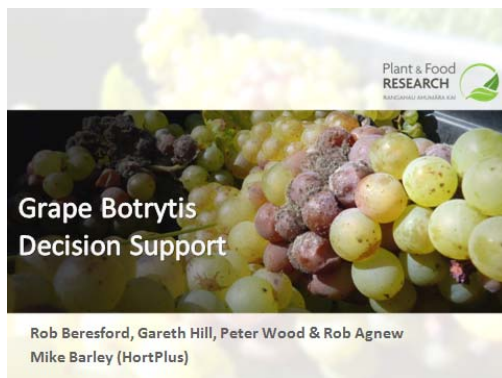
This seminar detailed some of the botrytis modelling and monitoring work that has been funded by New Zealand Winegrowers, (project number NZW 11-120) and conducted by Plant & Food Research over recent years and how these models are now available for the industry to use. It highlighted the early and late season Botrytis Decision Support Models (BDSM) and the Bunch Rot Assessment Trainer (BRAT). The BDSM model is now freely available for all growers to access online. The BRAT model is also available online with free access for trial use. New botrytis field assessment sampling protocols under development were also outlined.

Number of people in attendance at Botrytis seminar – 25

Three staff from Plant & Food Research in Auckland made presentations:

### 1.1 Grape botrytis decision support models

Dr Rob Beresford, Senior Scientist, Plant & Food Research, Auckland



The Botrytis Decision Support Models can be accessed freely at:

<http://www.botrytis.co.nz/>

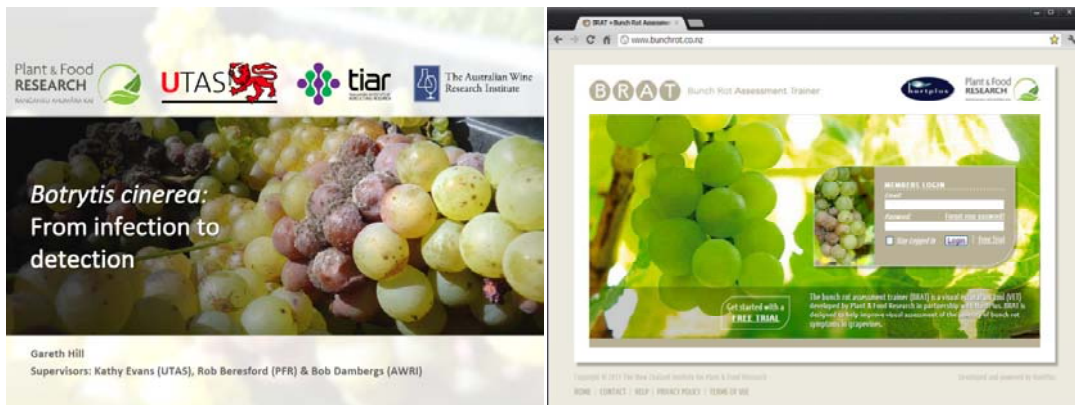




## 1.2 **Botrytis cinerea, from infection to detection and Bunch Rot Assessment Trainer – BRAT**

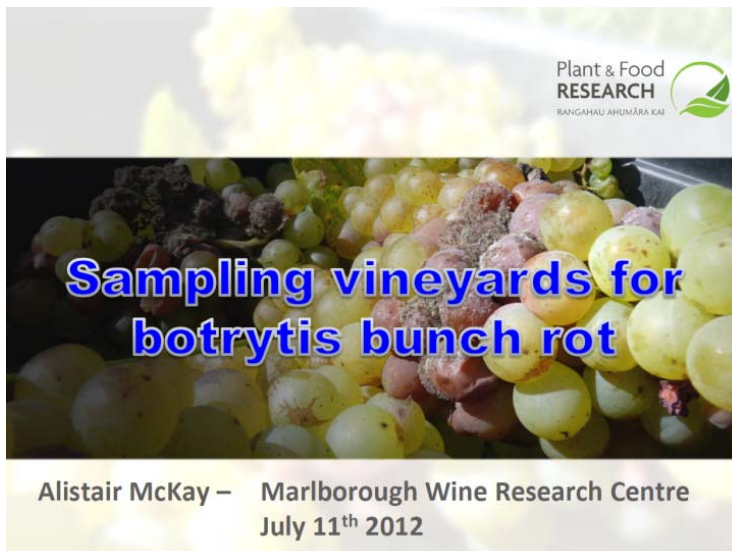
Gareth Hill, Research Associate, PhD student, Plant & Food Research, Auckland

The Bunch Rot Assessment Trainer can be accessed at: <http://www.bunchrot.co.nz/>



## 1.3 **Sampling vineyards for botrytis bunch rot**

Dr Alistair McKay, Scientist, Plant & Food Research, Auckland



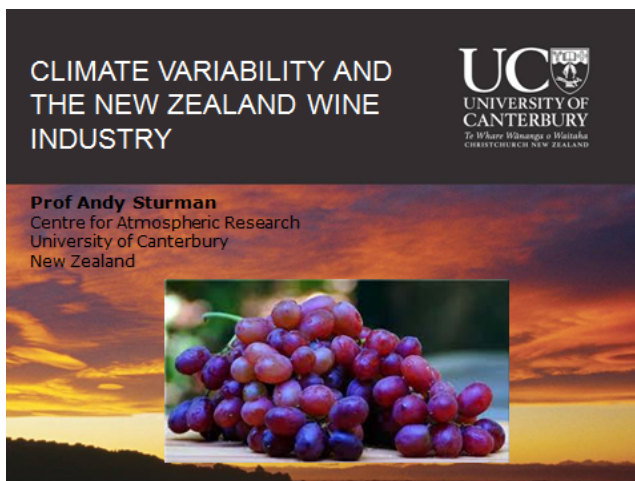
## 2 Development of advanced weather and climate modelling tools to help vineyard regions adapt to climate change – 16 October 2012

The Ministry of Business, Innovation and Employment (MBIE) announced in 2012 that it had awarded \$500,000 funding over the following two years for a project titled “Development of advanced weather and climate modelling tools to help vineyard regions adapt to climate change”. A case study in Marlborough is investigating the variability in local climate and grapevine response, using high-resolution models and measurements. The project will also evaluate the sensitivity of major grape varieties to climate variability and potential adaptation strategies. Three of the principal researchers involved in this project spoke at the climate seminar on 16 October 2012 on the topics below.

Number of people in attendance at Climate Change seminar – c. 35

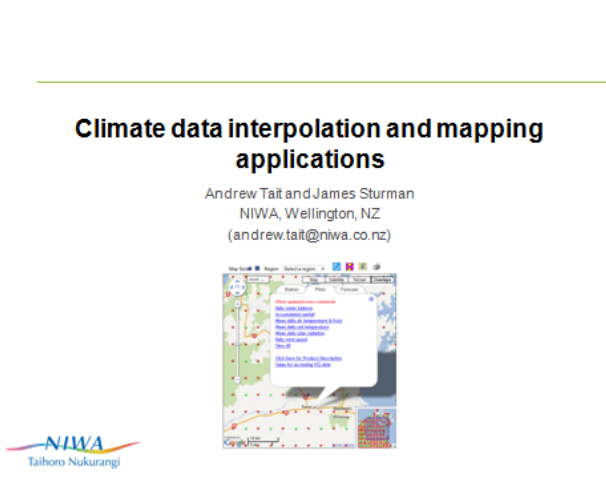
### 2.1 Climate variability and the New Zealand Wine Industry

Professor Andrew Sturman, Head of Department of Geography, University of Canterbury



### 2.2 Climate data interpolation and mapping applications

Dr Andrew Tait, Principal Scientist, National Institute of Water & Atmospheric Research, Wellington





## 2.3 Seasonal fluctuations in grapevine yield components

Dr Mike Trought, Principal Scientist, Plant & Food Research, Blenheim

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RANGAHAU AHUMĀRA KAI



Seasonal fluctuations in grapevine  
yield components

Mike Trought  
Plant & Food Research



### 3 Falcons for grapes for falcons – 10 December 2012

Presenter - Dr Sara Kross

Number of people in attendance at Falcons for Grapes seminar – c. 40

The iconic, but threatened, New Zealand falcon is the country's only remaining endemic bird of prey. Once found throughout the South Island, falcons are now generally restricted to high-country habitat, but from 2005-2011 a project called 'Falcons for Grapes' relocated falcon chicks from the hills in Marlborough and into the vineyard-dominated valleys. For her PhD, Sara Kross conducted research to determine if relocating falcons can provide vineyards with a form of natural pest control. She also examined whether vineyards were an optimal habitat within which falcons can live and breed. Dr. Kross presented the findings from her thesis, and outlined the ongoing falcon conservation work now being undertaken by the Marlborough Falcon Conservation Trust.



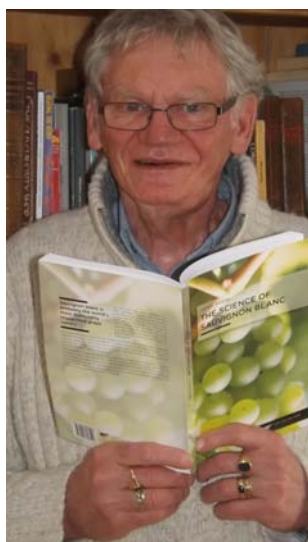
1. Dr Sara Kross was the programme manager of the Marlborough Falcon Trust. [www.mfct.org.nz](http://www.mfct.org.nz) until early in 2013.
2. Diana Dobson, Avian Manager, of the Marlborough Falcon Trust. Diana brought along a native falcon named Fern that she regularly takes on visits to schools in the Marlborough region.

Fern the falcon. Fern silently discussed her personal food preferences while sitting on Diana's arm. Having a large native falcon in such close proximity made a lasting impression on those in the audience. Fern also left a lasting impression on the carpet!

## 4 Marlborough wine: past, present, and in 2050. What role research? Seminar - 1 March 2013

Number of people in attendance at Past, Present and Future seminar – c. 70

Biography for Richard Smart - So-called "*The Flying Vine Doctor*"



Richard Smart has been involved with viticulture around the world since the mid 1960s. He is a very experienced viticulturist, from teaching, research and consulting viewpoints. Most of Richard's career has been in viticultural research and teaching, at Griffith, NSW, at Roseworthy College in South Australia (including a period as Dean, Faculty of Oenology), and also as Government Viticultural Scientist in New Zealand. There, with his team of co-workers he helped to lay the viticultural foundations for an emerging, quality-oriented and internationally competitive wine industry.

He has authored or co-authored over 380 publications, including the internationally acclaimed book "Sunlight into Wine", which is regarded globally as the reference on canopy management. Another significant achievement was as Viticultural Editor and principal contributor to the multi-award winning *The Oxford Companion To Wine* (1994, 1999 and 2006), edited by Jancis Robinson MW

### Seminar Topic

Dr Richard Smart took a retrospective look at the Marlborough wine industry, from when he first visited in the late 1970s, to its present status, and how/why it got there, and where it might be in two generations, by 2050. And indeed, what might be the research needs?

## 5 Understanding New Zealand Farmer Perspectives and Responses to a Changing Climate and Policies – 30 May 2013

Number of people in attendance at Farmer Perspectives seminar – c. 30

### Presenter - Meredith Niles

New Zealand agriculture is a key industry for the nation. Marlborough wine has especially become a key export to the world, branding itself as New Zealand's key wine. Yet this reputation could be affected by changing temperature and water regimes in the future, as well as the potential for increased extreme events. This talk highlighted the results of a farmer survey conducted in Marlborough and Hawke's Bay New Zealand in spring 2012 to understand farmer perspectives on changing climates, and future responses to adapt and mitigate climate change. The talk highlighted the potential benefits and challenges of relevant practices within the wine industry and encouraged a discussion among participants related to changing climates and policies.



### Biography for Meredith Niles

Meredith Niles is a PhD candidate in Ecology at the University of California, Davis, USA, and a United States National Science Foundation Fellow. She has worked as a Visiting Scientist at AgResearch in Lincoln and Palmerston North, New Zealand. Her research, in Marlborough and Hawke's Bay New Zealand, and California, examines farmer perceptions of changing climates, and policies and the types of practices farmers may adopt in the future to adapt to and mitigate climate change. She works closely with farmers, agricultural industry, and policymakers in her research and outreach efforts.



Understanding Marlborough Wine Grape Grower Perspectives & Responses to a Changing Climate & Policies

**Meredith Niles, PhD Candidate,  
University of California, Davis**



## 6 Varietal phenology and maturation in the grapevine and its interaction with leaf area to fruit weight manipulations – 19 June 2013

**Presenter - Dr Amber Parker, Plant & Food Research, Lincoln**

Number of people in attendance at Varietal Phenology seminar – c. 20

### Overview of Presentation

This talk explored the interfaces among genetic, environment and management interactions on the timing of the phenological stages of flowering, véraison and berry maturation for different grape varieties. The talk highlighted the differences in timing of flowering and véraison for approximately 100 varieties and looked into our definitions of véraison for two varieties important to the New Zealand wine industry, Sauvignon blanc and Pinot noir. The elasticity of varietal phenology and berry maturation was investigated for these two varieties in response to altering crop management. The implications of varietal choice and canopy management choices were discussed in the context of climate change.

### Biography for Amber Parker

Amber Parker originates from Christchurch. After graduating from Canterbury University with a degree in Molecular Biology, she completed an international Master of Science Vintage degree in Vine, Wine and Terroir Management at L'Ecole Supérieure d'Agriculture d'Angers, Angers, France. She returned to New Zealand to do a PhD at Lincoln University, based with Plant & Food Research at the Marlborough Research Centre, with occasional sojourns to Bordeaux. She currently works at Plant & Food Research, Lincoln, in the systems modelling team, specialising in grape modelling. Her research focuses on modelling phenology and berry composition of different varieties in response to climate and viticultural practices.

Varietal phenology and maturation in the grapevine:  
its interaction with leaf area to fruit weight manipulations

Amber Parker  
Email: [amber.parker@plantandfood.co.nz](mailto:amber.parker@plantandfood.co.nz)

Supervisor: Dr Rainer Hofmann  
Co-supervisor: Dr. Michael Trought  
External Co-supervisor: Prof. Cornelis van Leeuwen  
Assoc. Supervisor: Prof. Don Kulasiri

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