



Department of
Primary Industries

NSW DPI Viticulture Skills
Development Program

Riesling Royale Workshop and Masterclass



www.dpi.nsw.gov.au

Wednesday 18 May 2022
QT Canberra, 1 London Circuit, Canberra, ACT 2601

Program

Time	Activity	Presenter
8.30–9.00	Arrival and registration (tea and coffee available)	
History, markets and materials		
9.00–9.05	Welcome and introduction, Darren Fahey (NSW DPI)	
9.05–9.25	The history of German Riesling, Bruno Holzapfel (NSW DPI)	
9.25–9.45	Overview of Australian Riesling markets, Peter Bailey (Wine Australia)	
9.45–10.05	Riesling planting material and clones, Nick Dry (Foundation Viticulture)	
10.05–10.30	Morning tea	
Grower and winemaker perspectives		
10.30–10.50	Jacob Stein (Robert Stein Wines)	
10.50–11.10	Ken Helm AM (Helm Wines)	
11.10–11.30	Frank van de Loo (Mt Majura Wines)	
11.30–12.10	First tasting panel – NSW wines with Phil Reedman, assisted by Jacob Stein, Ken Helm AM and Frank van de Loo	
12.10–12.50	Lunch	
12.50–13.10	Will Gilbert (Gilbert Family Wines)	
13.10–13.30	Nick O’Leary (Nick O’Leary wines)	
13.30–13.50	Bill Shrapnel (Colmar Estate)	
13.50–14.30	Second tasting panel – other Australian states with Phil Reedman, assisted by Nick O’Leary, Bill Shrapnel and Will Gilbert	
14.30–14.45	Afternoon tea	
14.45–15.05	Louisa Rose (Pewsey Vale Vineyards)	
15.05–15.25	Sam Connew (Stargazer Wines)	
15.25–15.45	John Hughes (Rieslingfreak)	
15.45–16.05	Theresa Breuer, Georg Breuer Winery (Rüdesheim)	
16.05–16.25	Jason Smith (Charles Sturt) and Marco Hofmann (Hochschule Geisenheim University)	
16.25–17.05	Third tasting panel – International wines with Phil Reedman, assisted by Sam Connew, Ken Helm AM, Jacob Stein and Frank van de Loo	
17.05–17.10	Summary of the day, Darren Fahey (NSW DPI)	

Presenters

Darren Fahey, NSW Department of Primary Industries



Darren is a Development Officer delivering activities within the Viticulture Skills Development Program on behalf of the NSW Wine Industry Association and the Wine Australia funded Regional Program for Greater NSW/ACT. Darren previously worked for the Australian Organic Recycling Association as a Development Officer helping to establish the industry across Australia. Darren has accumulated over 15 years' experience in wine industry related business, research, development and extension. Darren holds a Bachelor of Horticultural Science, a Graduate Certificate in Business and is currently undertaking a Masters of Leadership with Deakin University.

Dr Bruno Holzapfel, NSW Department of Primary Industries



Bruno Holzapfel was appointed to NSW Agriculture in 1996 as a research viticulturist after working as a Post-Doctoral Fellow with CSIRO for 3 years following the completion of his PhD in 1993. He is currently a Senior Research Scientist with NSW Department of Primary Industries and has more than 30 years practical and research experience in deciduous perennial horticulture, specialising in grapevines.

Peter Bailey, Wine Australia



As Manager of Market Insights, Peter leads a team that keeps the Australian wine sector informed by collecting, presenting and disseminating global wine sector insights.

Peter joined Wine Australia as Senior Analyst in 2006 and was promoted to the senior management team in 2010. Previously he spent a decade in the Australian energy industry, his last role being Manager, Commercial Analysis at Origin Energy.

He holds a Bachelor of Applied Economics and a Bachelor of Business (Honours EF) from the University of South Australia and has also completed a Graduate Diploma in Applied Finance and Investment from the Securities Institute of Australia.

Nick Dry, Foundation Viticulture



Nick has spent the last 11 years managing Yalumba Nursery; a role which has allowed him to develop an extensive knowledge of variety, clone and rootstock performance, along with an intimate understanding of grapevine trunk disease, grapevine virus and nursery practices. Along with technical expertise, Nick has also developed solid business management and communication skills. In November 2019, he very amicably parted ways with Yalumba to start his own consulting business 'Foundation Viticulture'. In September 2019 he was awarded the Gourmet Traveller WINE Viticulturist of the year.

Jacob Stein, Robert Stein Wines



Jacob Stein is a third-generation Mudgee Winemaker, however his family history dates back to 1838 when Johann Stein arrived from Germany with cuttings of Rhine Riesling. Jacob completed his degree in Viticulture and Winemaking in 2005 and then set off for 4 years and 8 vintages across many regions all over the world. However, it was the numerous vintages in the Rheingau and Rheinhessen in Germany that instilled his affinity for the Riesling grape and wine.

Since returning home in 2009, the Robert Stein vineyard, farm and winery has grown in size and reputation to become one of the most reputable

producers and Riesling brands in Mudgee and NSW. Robert Stein Riesling has been awarded over 30 trophies and 75 gold medals during the last 10 years including The Sydney Royal Trophy for Best Riesling in 2019 and 2021.

The winery has undergone extensions and upgrades to meet the rising demand of the brand and also to house the many contract winemaking clients they have. The farm and vineyards are managed with a soft approach; some blocks are organically certified and are also well integrated with Angus beef cattle, Dorper sheep, pasture cropping and a free-range pig herd to complement their cellar door, restaurant and winery brand.

The Robert Stein Wine brand is well recognised nationally as a Wine Companion Red Five Star winery, a Real review top 100 winery, and Jacob Stein being recognised as Mudgee 'Winemaker of the year' consecutively since its inception 5 years ago.

Ken Helm AM, Helm Wines



Ken Helm AM was born in Albury, being the 5th generation of German winemakers who arrived in 1849 and established the Rutherglen vineyards. He joined the CSIRO Division of Entomology as an insect ecologist after completing his education, and over the next 22 years published several peer-reviewed papers on insect migration, insect pest management and grape pests such as phylloxera. He was transferred to Canberra in 1967 and found many who shared his interest in wine. Ken and Judith met in Canberra and married in 1969. They continued their interest in wine and decided to extend the interest by purchasing land in 1973 near Murrumbateman and plant vines. Many sceptics thought the actions were foolish. In 1988 he

took early retirement from CSIRO to develop their winery full-time.

Ken stood and was elected as a Yass Shire Councillor in 1988, which he held for 12 years and served 2 terms as Mayor. The Shire is now very supportive of the local wine industry, which is now the most important tourist attraction in the district and one of the major rural industries.

Ken has spent considerable time in the German wine regions judging Rieslings as a guest of the Rhineland Pfalz government. This also allowed him to develop a broad knowledge of Riesling making and a strong network of colleagues in the wine industry.

Helm Wines have won hundreds of trophies and awards for a range of Riesling over the last 45 years, with a policy of each showing their 'place'. Ken believes that the vineyard makes great Rieslings and the winemaker is the custodian of the grapes, whose job is to take the grapes through to wine without losing the unique flavours, balance and delicacy that has been produced in the vineyard.

For 10 years Ken lobbied in Federal Parliament for the wine industry, was the founding member of the Independent Wineries Association, and many other winemaking groups. In 1999, he initiated and chaired the Canberra International Riesling Challenge, now the biggest event of its type in the southern hemisphere.

In 2010, *Riesling in Australia* was published, which Ken co-authored with Trish Burgess. This book takes a definitive look at the history of Riesling in Australia, the regions, the legends and the producers.

Ken's contribution to the Australian Wine Industry has been recognised:

- 2010 Australia Day Honours, appointed a Member in the General Division AM for service to the Australian wine industry as winemaker, through the promotion of the Riesling white grape variety, and as a supporter of cool climate wine producers, and to the community of the Canberra/Yass region
- 2006 Wolf Blass Award for his contribution to the development and promotion of Riesling, by instigating the Canberra International Riesling Challenge
- 1997 Graham Gregory Trophy for outstanding services to the NSW Wine Industry by the NSW Government.

Frank van de Loo, Mount Majura Wines



Frank van de Loo is the winemaker and general manager/part owner of Mount Majura Vineyard in the Canberra District, where he has overseen development for more than 20 years. Coming from a background in plant science research, his winemaking starts with variety selection and viticulture, and is focused on making wine that best expresses the vineyard character. This has involved many trials ranging from alternative varieties and ecological vineyard approaches to fermentation techniques and unusual wine styles.

Philip Reedman, Master of Wine Pty Ltd



Philip has spent his working life in wine and has been actively involved with Australian wine for 35 years. Working vintages in Alsace, The Douro Valley and the Barossa Valley, Philip has subsequently made wine in Argentina, Chile, Californian, Washington State, New Zealand, Bergerac and South Africa.

A certified educator for the Wine and Spirit Education Trust, Philip is also highly involved in education through the Institute of Masters of Wine for whom he teaches at seminars in Europe and Australia.

Philip is a judge at Regional, Capital City and International wine shows, a speaker at industry conferences around the southern hemisphere and lecturer by invitation to ESC Dijon, Kedge Business School and the University of South Australia. Philip also works with the Australian Wine Research Institute's Advanced Wine Assessment Course as a guest judge helping to train future wine show judges.

Philip works as a consultant to many wineries, vineyards and retailers in South Australia and internationally.

Will Gilbert, Gilbert Family Wines



Will Gilbert is a sixth-generation winemaker, with his great-great-great-grandfather Joseph Gilbert, responsible for planting some of the first Riesling in the Eden Valley in 1847. That legacy is honoured under the Gilbert Family Wines today, where he works alongside his father Simon. Under the Gilbert label there is a range of Eden Valley rieslings, but the core of the [Gilbert operation](#) is in Mudgee and the frosty climes of Orange, New South Wales, with a strong focus on Riesling, Pinot Noir, Chardonnay and sparklings by the traditional method, made in a way that highlights purity and elegance.

Nick O'Leary, Nick O'Leary Wines



Nick O'Leary wines are produced from some of the very best cool climate vineyards across the Canberra region.

Situated in the picturesque Hall Valley in the Murrumbidgee River corridor just outside the ACT, the estate incorporates a modern winemaking facility and a mature 5-hectare vineyard.

Since the estate began, well over a decade ago, our focus has always been to make hand-worked Shiraz and Riesling wines that truly exhibit the character of our region as well as expressing our unique personality and style.

The wines have received high profile recognition at national and international level, including the prestigious Stodart Trophy in 2014 and NSW Wine of the Year in both 2014 and 2015 – the latter being the first and only time in the awards 20-year history that the accolade has been received multiple times by a single producer, let alone in consecutive years.

Bill Shrapnel, Colmar Estate



Bill Shrapnel has tertiary qualifications in applied chemistry, nutrition and health planning. As a leading nutritionist, he had a varied career in the public health system, the non-government sector and consulting to the food industry in Australia and overseas. He has authored a book for the general public and published over a dozen scientific papers in peer-reviewed journals. In 2013, Bill and his wife Jane realised a long-standing ambition when they purchased a high-altitude vineyard in Orange now known as Colmar Estate. From the outset their goal was to produce premium quality wines from estate-grown, hand-picked fruit, primarily from white varieties and pinot noir. Riesling has been the

standout white variety and the evolution of wine styles from Riesling is now a focus for the business. Colmar Estate received the Trophy for Best Exhibitor at the Orange Wine Show in 2018 and 2019.

Louisa Rose, Pewsey Vale Vineyard



Louise joined the Hill-Smith Family Vineyards team when she began working the 1992 vintage as a cellar hand at Yalumba and returned to join the team in January 1993. 31 vintages later, Louisa has worked alongside many legends, being involved in almost every facet of viticulture, winemaking and management. This led her to accept the role of chief winemaker, which she quietly stepped into in 2006.

A particular focus for Louisa has been the Riesling wines from the historic Pewsey Vale Vineyard, which she has made since 1995.

Louisa has received many awards for her work including 1999 Barossa Winemaker of the Year; 2004

International Woman in Wine (London IWSC); 2008 Gourmet Traveller WINE Magazine 'Winemaker of the Year'; 2008 Wolf Blass Award for contribution to the development and promotion of Riesling; 2013 Winemaker of the Year by the Australian Society of Viticulture and Oenology; and in August 2014 she was voted the best winemaker in Australia by 100 of her peers – winemakers, sommeliers and wine buyers from around the country.

Louisa has judged in both Australian and International Wine Shows, most recently as the chair of judges of the Adelaide wine show and the Australian National Single Vineyard wine show. She is an active Council member and 'Grand Master' of the Barossa winemaking fraternity Barons of Barossa. She is Chairman of the Board of the Australian Wine Research Institute and Chair of the Alumni Council of The University of Adelaide. In 2017 Louisa was named a Fellow of the Australian Society of Viticulture and Oenology.

Sam Connew, Stargazer Wines



A highly experienced and respected winemaker and consultant, Samantha Connew launched her Tasmanian solo project, Stargazer, in 2013. Before establishing this and her consulting company, Compass Wine Consulting, she was employed in applied research, development and extension for the Australian Wine Research Institute as manager of the Hunter Valley node. Previously she was the winemaker/manager of boutique Hunter Valley winery Tower Estate, after working in McLaren Vale for 10 years as the senior winemaker at Wirra Wirra Vineyards.

Among her many achievements, in 2007 she was awarded International Red Winemaker of the Year at the prestigious International Wine Challenge in

London, and in 2008 she was a South Australian finalist in the Telstra Business Women's Awards. She has served on the boards of several regional associations and was a board member of the Australian Society of Viticulture and Oenology. Sam was also a founding board member of the Australian Women in Wine Awards and is currently a director on the Wine Tasmania Board.

Sam is a highly respected wine show judge and has chaired many regional and capital city wine shows, having completed both the AWRI's Advanced Wine Assessment Course and the Len Evans Tutorial, where she continues her involvement as a tutor.

In 2014, she was appointed Chair of Judges at the Sydney Royal Wine Show; the first female and the youngest judge in that position. In 2016, she acquired a small vineyard and olive grove in the Coal River Valley north-east of Hobart, which she expanded by an additional 2 hectares in 2017. Under her stewardship, this vineyard was awarded Tasmanian vineyard of the year in 2019.

John Hughes, Rieslingfreak



As the name would suggest, I am a freak for all things Riesling... What I love most about my line of work is that for me, it's not a job, it's my passion. I don't see my occupation as work, as each day I am creating and working with what I love... Riesling!

Growing up on the family vineyard in the beautiful Clare Valley (a wine region known for its superb Riesling), it was only natural that I had an appreciation for the Riesling variety from a young age.

As I grew up, so did my passion for Riesling. Once old enough to really appreciate a quality Riesling, I found a new appreciation for many European Rieslings, and kept a close eye on what a handful of German

winemakers were doing. To this day, I still keep an eye on German winemaking techniques and enjoy referencing their style for inspiration so I can apply to the Rieslingfreak collection.

With a love for the sweeter white wines, my cellar is now stocked with many Kabinett and Spatlese styles from his German counterparts. I can safely credit my appreciation for aged Riesling to my parents; hence you will always find some great aged Riesling in my 30-year-old cellar.

While I love that each and every Rieslingfreak wine can be enjoyed on its own, I love the role that food plays in transforming and completely revolutionising the entire food and wine experience. On weekends, you'll always find me in the kitchen... and a glass of Riesling is never too far away!

Theresa Breuer, Georg Breuer Winery (Rüdesheim)



'Wild Rieslings'

Theresa Breuer always looks at life from the positive side. With her authentic and lively nature, she has firmly established herself among Rheingau winegrowers and in the international wine world.

Theresa's father, Bernhard Breuer, was no stranger among German winegrowers and fought as a pioneer for the quality and identity of the Rheingau wines.

Theresa relies on openness and cooperation so new projects come to the Rüdesheim winemaker as if by themselves. Whether grape exchange with other wineries, a merger with young Rheingau winegrowers

or a film project about winegrowers – Theresa is there. She rarely says "no" to new ideas and projects because she takes something away from every experience, also for her life. *"Every new experience brings me something"*.

She has the same motto as her father: never stand still. She took over the winery when Bernhard Breuer died suddenly in 2004 at the age of only 20, this helped her common attitude towards life, to look straight ahead. She learned that in fast forward, managing the company and studying in Geisenheim at the same time.

In 2016 she was voted winemaker of the year by the Falstaff. However, Theresa doesn't like to be the centre of attention; *"I don't want to pretend to anyone that I farm 34 hectares alone"*. The 16 employees who put their work and energy into the winery all year round, the wines only exist because of them. This is also reflected in the Breuer wines, 80% Rieslings.

Marco Hofmann, Hochschule Geisenheim University



Marco Hofmann studied physics, viticulture and oenology and has worked for many years at the Department of General and Organic viticulture at the Hochschule Geisenheim University. His research focuses on climate change and its effect on viticulture and vineyard water budgets. He applied a vineyard water budget model to the Rheingau with extensions specifically for the steep-slope parts of the winegrowing region, which are being increasingly affected by rising temperatures and water stress. Outside his research career he also has his own small winemaking business and produces around 2,000 bottles of Riesling from a steep-slope vineyard near Bacharach in the Middle Rhine Valley. Currently, he is working with Jason Smith from CSU in Orange on modifications of the model needed to apply it for vineyards in Australia.

Dr Jason Smith, Charles Sturt University



Dr Jason Smith is a Senior Research fellow in viticulture based with the Gulbali Institute for Agriculture, Water and Environment at the Orange campus of Charles Sturt University. Since early 2019, Jason has been undertaking research into vineyard water balance and the adaptation of production systems to rainfall variability and drought. This work has a focus on cooler climate systems from a scale of multi-season variations in soil water dynamics down to irrigation use in predominately rain dependent viticulture. Previously, Jason spent three years with the Hochschule Geisenheim University in Germany, teaching viticulture and contributing to research into grapevine water use under elevated CO₂ at the university's free air carbon dioxide enrichment facility. His presentation today will describe the current work in Orange to provide context for international Riesling research and potential applications for Australian production systems.



Riesling Royale Workshop Workshop and Masterclass Wednesday 18 May 2022

Notes

[illegible]



Department of
Primary Industries

NSW DPI Viticulture Skills
Development Program

Riesling Royale Workshop and Masterclass



www.dpi.nsw.gov.au

Wednesday 18 May 2022
QT Canberra, 1 London Circuit, Canberra, ACT 2601

NEW SOUTH WALES

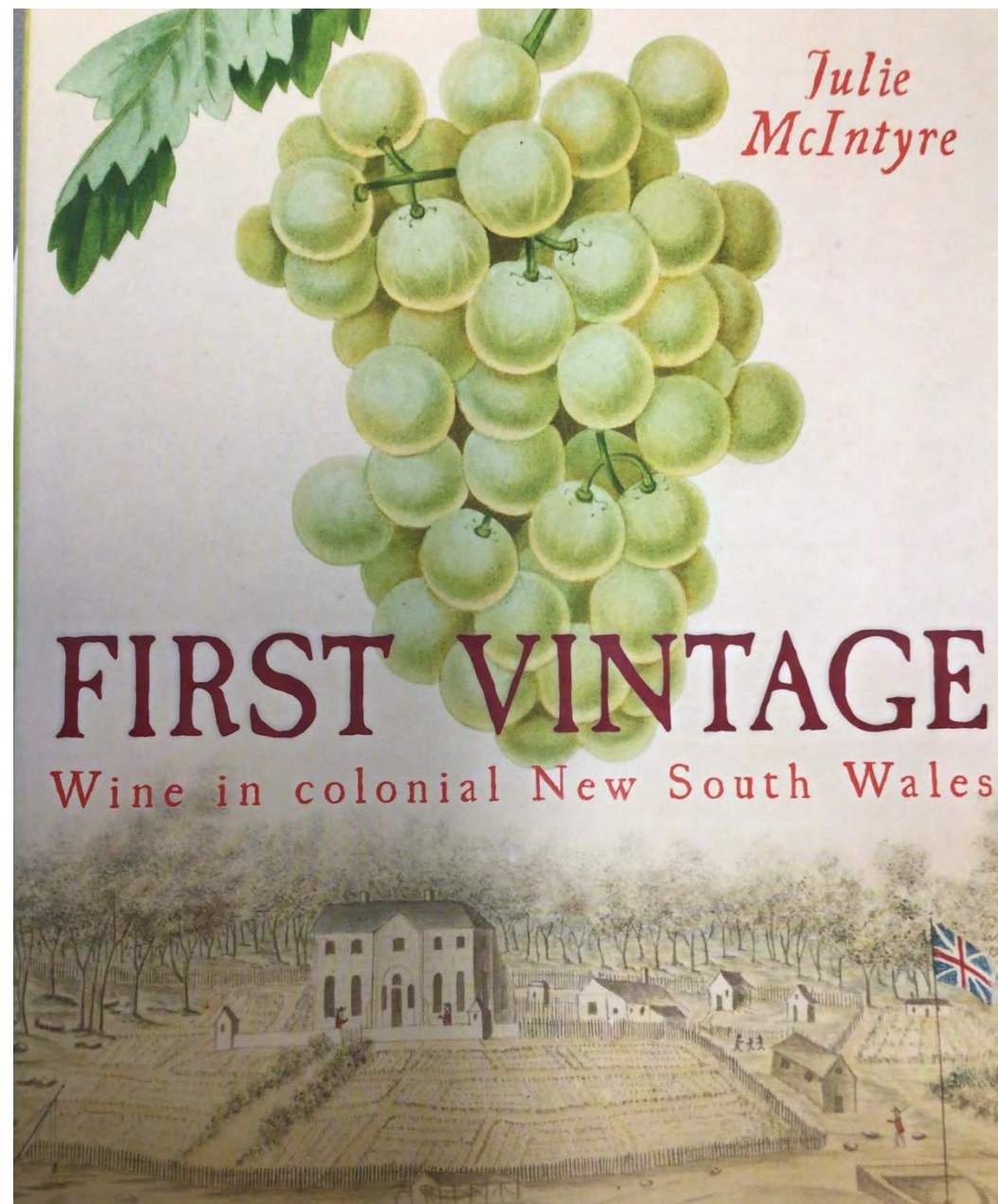


Department of
Primary Industries

Wi-Fi Network: QT-Event
Password: GreatEvent

Program

Time	Activity	Presenter
8.30–9.00	Arrival and registration (tea and coffee available)	
History, markets and materials		
9.00–9.05	Welcome and introduction, Darren Fahey (NSW DPI)	
9.05–9.25	The history of German Riesling, Bruno Holzapfel (NSW DPI)	
9.25–9.45	Overview of Australian Riesling markets, Peter Bailey (Wine Australia)	
9.45–10.05	Riesling planting material and clones, Nick Dry (Foundation Viticulture)	
10.05–10.30	Morning tea	
Grower and winemaker perspectives		
10.30–10.50	Jacob Stein (Robert Stein Wines)	
10.50–11.10	Ken Helm AM (Helm Wines)	
11.10–11.30	Frank van de Loo (Mt Majura Wines)	
11.30–12.10	First tasting panel – NSW wines with Phil Reedman, assisted by Jacob Stein, Ken Helm AM and Frank van de Loo	
12.10–12.50	Lunch	
12.50–13.10	Will Gilbert (Gilbert Family Wines)	
13.10–13.30	Nick O'Leary (Nick O'Leary wines)	
13.30–13.50	Bill Shrapnel (Colmar Estate)	
13.50–14.30	Second tasting panel – other Australian states with Phil Reedman, assisted by Nick O'Leary, Bill Shrapnel and Will Gilbert	
14.30–14.45	Afternoon tea	
14.45–15.05	Louisa Rose (Pewsey Vale Vineyards)	
15.05–15.25	Sam Connew (Stargazer Wines)	
15.25–15.45	John Hughes (Rieslingfreak)	
15.45–16.05	Theresa Breuer, Georg Breuer Winery (Rüdesheim)	
16.05–16.25	Jason Smith (Charles Sturt) and Marco Hofmann (Hochschule Geisenheim University)	
16.25–17.05	Third tasting panel – International wines with Phil Reedman, assisted by Sam Connew, Ken Helm AM, Jacob Stein and Frank van de Loo	
17.05–17.10	Summary of the day, Darren Fahey (NSW DPI)	



Wines of NSW – Wine 1

2021 Colmar Estate Block 5 Riesling Orange RRP \$35.00



Trophy Best Riesling - 2021 Orange Wine Show
Gold Medal - 2021 Orange Wine Show

Wines of NSW – Wine 2

2021 Pepper Tree Stone Mountain Single Vineyard Riesling

Hunter Valley/Orange RRP \$50.00

VINTAGE

A tricky vintage in Orange with rain framing the end of harvest. The whites produced are the best we have seen off this vineyard with intense florals and remarkable acidity.

WINEMAKING

The fruit was hand picked at first light, chilled and then whole bunch pressed and settled bright before being inoculated for ferment. The resulting wine was then settled, lightly fined and prepared for bottling.



TECHNICAL INFORMATION:

BLEND:	Riesling (100%)
--------	-----------------

BOTTLING DATE:	05/2021
----------------	---------

BOTTLE NUMBER RANGE:	1 - 1471
----------------------	----------

PH:	2.92
-----	------

TA:	7.9 g/l
-----	---------

ALC/VOL:	12.0%
----------	-------

STANDARD DRINKS:	7.1
------------------	-----

Wines of NSW – Wine 3

2021 Mount Majura Riesling Canberra District RRP \$30.00

WINEMAKING

Hand-picked 12-16 March at 11.1 Baumé. Only the free-run juice was taken, clarified by flotation and fermented cool before stopping at 8.5g/l residual sugar for balance.

Bottled under screwcap July 2021, 977 dozen made (plus 143 magnums).

Alcohol 12.0% by volume.

Vegan friendly?: No (fined with gelatin and a milk product).

Gold Medal, NSW Wine Awards 2021

Gold Medal, Canberra & Region Wine Show 2021





Wines of NSW – Wine 4

2021 Nick O'Leary Heywood Riesling Canberra District RRP \$34.00

Taste:

In keeping with our house style yet proudly displaying the unique personality of our home vineyard. This single vineyard wine retains the pure citrus character of our other rieslings but with a fresh green melon character not found in our other wines.

Winemaking:

Consisting of two parcels from our estate vineyard. Grapes were hand harvested at 12 Baume, 80% whole bunch pressed and cool fermented in stainless steel with 20% whole berry fermented in ceramic. The wine was then held on light lees until bottling in June 2021.



Wines of NSW – Wine 5

2021 Helm Premium Riesling Murrumbateman RRP \$60.00

VINTAGE 2021

WINEMAKER Ken Helm

REGION Canberra District

HARVESTED March 2021

BOTTLED May 2021

ALCOHOL 11.5%

The fruit was sourced this vintage from the Lustenberger vineyard with the Riesling GM198 clone.

Winefront – Mike Bennie (95 points)

Top of the tree riesling in Australia. . Green apple, lime, lemon, blackcurrants, a touch of citrus oil too. Impact and yet grace and so, so much energy. Crazy good riesling.

Huon Hooke—95 points Sweet stone-fruits and almost peach nectar aromas, soft and subdued. The palate is soft and round, gentle-textured and seamless, with acidity so well integrated it seems mild. A lovely dry style riesling, which drinks well already and should also age beautifully. 29 JAN 2022



Wines of NSW – Wine 6

2021 Ballinaclash Mad Dog Riesling Hilltops RRP \$27.00

Aromas of lemon blossom, mandarin and kaffir lime leaf. Dry, crisp and complex; this elegant first vintage Riesling displays juicy flavours of lemon and lime zest, sherbet and a mineral acidity.



Wines of NSW – Wine 7

2021 Robert Stein Reserve Riesling Mudgee RRP \$60.00

Awards



Gold Medal

Gold – Mudgee Wine Show –

Silver – Sydney Royal Wine Show –

Reviews

GOLD MEDAL

2021 Mudgee Wine Show

SILVER MEDAL

2021 Sydney Royal Wine Show

BRONZE MEDAL

2021 NSW Small Winemakers Show

BRONZE MEDAL

2021 Australian National Single Vineyard Wine Show

BRONZE MEDAL

2021 NSW Wine Awards

Alcohol 11%, pH 3.03 & Sugar 2.1g/l



Wines of NSW - Wine 8

2021 Gilbert RS11 Riesling Mudgee/Orange RRP \$36.00

From the Producer

The combination of high elevation, cooler climate and plentiful sunshine, is vital to the fruits ability to develop intense aroma and maintain flavour, giving these wines a long elegant mouth feel and flavour profile.

Blend : Riesling (100%)

Drink Until : 2027



Other Australian states – Wine 1

2021 Freycinet Riesling TAS RRP \$32.00

Bicheno

13% Alc Vol.

*** 2020 REVIEW ***

"Tasmania showcases Riesling's wonderfully exotic side and its high-tensile endurance, but rarely are these united as effortlessly as this. Low yields made for impressive concentration of star fruit, wild lemon and golden kiwifruit. Honed by gloriously crystalline acidity, it glides with consummate control, precision and endurance. One of the greats, it will live forever."

Other Australian states – Wine 2

2021 Stargazer Riesling TAS RRP \$35.00

Technical Information

- Hand harvested in two picks on 16 April 2021 at 11.6 Bè and 20 April 2021 at 12.5 Bè.
- Both picks were destemmed and left in contact with skins for about eight hours prior to gentle pressing.
- The majority was wild fermented (by indigenous yeasts) in stainless steel over a month; 13% was fermented in older wild oak.
- A small portion (5%) was fermented on skins and then pressed to an older oak puncheon.
- The stainless-steel ferment portion were arrested on 2 June and left on lees for close to two months with lees stirring fortnightly.
- Bottled 12 August 2021: 12% alc., 2.94 pH, 7.9 g/L titratable acidity, 7.4g/L residual sugar.
- Total production: 8031 bottles.



Other Australian states – Wine 3

2021 Frankland Estate Riesling WA RRP \$32.00

Made from 100% estate grown Riesling. A selection of small ferments was made from parcels of fruit harvested in some younger vines planted in 2006 on a high ironstone rocky ridge in the ironstone 'coffee rock' – the classic soil from the Frankland Estate property. This combines with some of original parcels of Riesling planted in 1988. Grapes are pressed immediately on arrival at the winery with the juice left to settle in tank overnight before being racked. The wine was then fermented in stainless steel tanks at relatively low temperatures (less than 14 deg C) over 4-6 weeks with minimal intervention in order to obtain the purest expression of the pristine, organically grown fruit. The wine was then left on its fermentation lees prior to bottling.





Other Australian states – Wine 4

2021 Cherubino 'Porongurup' Riesling WA RRP \$45.00

THE VINTAGE:

An exceptional vintage with rainfall falling at just the right times, Rieslings are some of the best in recent memory with expression of floral aromas and balanced acidities.

THE WINEMAKING:

The fruit was hand-harvested and grapes were gently de-stemmed. The free-run juice was fermented using natural yeasts, followed by a long, cool fermentation between 10-12°C.

THE WINE:

Pale quartz in colour, the bouquet has lime and apple with chalky minerality. This minerality continues on the palate with spices and more lime. The acidity is tight and long and the texture is soft.



Other Australian states – Wine 5

2021 Pewsey Vale Vineyard Riesling SA RRP \$26.00

WINEMAKER'S NOTES

PALE STRAW WITH GREEN HUES. INTENSE AROMAS OF FINE DRIED HERBS, WHITE FLOWERS, LEMONS AND LIME. A LONG AND RICH PALATE, REMINISCENT OF GRAPEFRUIT, LIME AND FRESH ROSEMARY. THE WINE FINISHES WITH A SOFT NATURAL ACIDITY WHICH BALANCES THE FLAVOUR AND MINERALITY THAT IS DELICIOUS NOW OR WILL REWARD MEDIUM TO LONG-TERM CELLARING.

ENJOY WITH FRESH OYSTERS, SEARED SCALLOPS, SALT AND PEPPER SQUID, THAI BEEF SALAD, OR A TOMATO SALAD WITH PICKLED WALNUTS AND FRESH BASIL

HARVESTED	17 FEBRUARY - 6 MARCH 2021
REGION	EDEN VALLEY
WINEMAKER	LOUISA ROSE
ALC/VOL	12.0%

TOTAL ACID	6.6 G/L
PH	2.99
RESIDUAL SUGAR	1.0 G/L



Other Australian states – Wine 6

2021 Rieslingfreak No.2 Polish Hill River Riesling SA RRP \$37.00



Awash with aromas of Granny Smith apple, jasmine and rose, while the palate bursts with bright citrus notes dancing lithely over a grounded flint-like minerality. The palate is softly slippery with bright natural acidity imparting exceptional length and a clean, crisp finish.

Other Australian states – Wine 7

2021 Annie's Lane Riesling SA RRP \$12.00

Annie's Lane Riesling offers a vibrant, fruity wine sure to be enjoyed by all. Light green in colour with a citrusy aroma, the palate is dominated by crunchy Granny Smith apples coupled with grapefruit blossom. The result is a fresh, delicious blend with a chalky mouthfeel that makes a great match with chicken, salmon and tuna.





Other Australian states – Wine 8

2021 Jim Barry The Florita Riesling SA RRP \$55.00

Winemaking Notes

On the nose, this wine displays all of the classic Clare Valley Riesling characters; lime and lemon juice, wet slate and mineral notes.

The palate commands respect from the moment it touches your taste buds. The mineral backbone is framed with citrus rind and morish sorbet.

The wine exerts power, yet is beautifully balanced and delicate.

Vintage Information

Variety:	100% Riesling
Vintage:	2021
Region:	Clare Valley, South Australia
Estate grown:	100%
Analysis:	Alc/vol 12.0% Total Acid 8.0g/L pH 2.9
Drink by:	2050
Serve at:	8°C
Winemakers:	Tom Barry & Ben Marx



Department of
Primary Industries

NSW DPI Viticulture Skills
Development Program

Riesling Royale Workshop and Masterclass



www.dpi.nsw.gov.au

Wednesday 18 May 2022
QT Canberra, 1 London Circuit, Canberra, ACT 2601

NEW SOUTH WALES



Department of
Primary Industries

Wi-Fi Network: QT-Event
Password: GreatEvent



International wines – Wine 1

2021 Felton Rd Dry Riesling NZ RRP \$58.00

Felton Road farms four properties totalling 34 ha in the Bannockburn subregion of Central Otago. Block 2 is an east facing gravel outwash fan situated on the Elms vineyard immediately to the north of Block 3. The soils are with very deep angular schist gravels with a thin loess covering. Meticulous summer management of a single vertical shoot positioned (VSP) canopy ensures even and early fruit maturity. Shoot thinning, shoot positioning, leaf plucking, bunch thinning and Harvest are all carried out by hand to ensure optimum quality fruit. Cover crops are planted between rows to assist in vine balance and to improve soil health and general biodiversity.



International wines – Wine 2

2021 Framingham Select Riesling NZ RRP \$35.00

SOURCE

REGION

Marlborough

SUB REGION

Conders Bend

VINEYARDS

Framingham Estate

VINE AGE

39 years old

SOIL TYPE

Stony, well drained old riverbed with silt and fist sized greywacke rocks

Framingham Select Riesling is inspired by the classic German “Spätlese” style. The wine is serious but delicate and light on its feet, with naturally low alcohol and great tension between residual sugar and acidity.

WINE MAKING

Selective hand harvest of golden bunches on 25th and 30th March at 21.7 brix (92.5 Öchsle), from the “front” old vines and the Back Spur block. Bunches were pressed whole and the resultant juices fermented cool in stainless steel.

TASTE

Vibrant aromatics with suggestions of, mandarin, Meyer lemon and honeycomb. Concentrated, elegant palate with red fruits, orange citrus, peach and some mineral, stone-like textures. Tense, juicy finish.

Acid 8.5 g/L, pH 2.9, ALC 9.5% vol



International wines – Wine 3

2020 Bründlmayer Riesling Kamptal Terrassen
(Austria-Niederösterreich)

RRP \$40.00

“Almost German style, this dry riesling has a great balance of citrus and stone-fruit aromas, as well as some nice fresh-herb notes. Juicy and well-structured with plenty of minerality, this is a delightful and complex wine that’s just beginning to give its best. Long finish. From organically grown grapes. Drink or hold. Screw cap.” (5/2021)

93 points

[jamessuckling.com](https://www.jamessuckling.com)



International wines – Wine 4

2020 Gunderloch Jean Baptiste Riesling Kabinett
(Germany-Rheinhessen)

RRP \$35.00

It's a vibrant, mouth-watering off-dry Riesling made mostly with fruit from Gunderloch's top vineyard, Rothenberg in the village of Nackenheim.

It shows zesty notes of ripe citrus fruit and rose petals on the nose. The palate adds red-slate spice edges and nectarine. Intense and precise, with slatey minerality.

<https://www.winesseek.com.au/>



International wines – Wine 5

2019 Koehler-Ruprecht Kallstadter Saumagen Riesling Spätlese Trocken
(Germany-Pfalz)

RRP \$80.00

Koehler Ruprecht

This historic estate, is undoubtedly one of the top estates in the Pfalz. Known for their broad, rich and minerally Rieslings, sourced from the two top locations in Kallstadt, the Steinacker and Saumagen vineyards.

Wine Notes: The Saumagen is the estate's crown jewel: 4 hectares of chalky marl and limestone in the shape of a saumagen, the specialty sausage of the region. This vintage, the dry Kab is a "true Kabinett:" light, spicy and elegant with beautiful lingering fruit and river stones.

International wines – Wine 6

2019 Georg Breuer Terra Montosa Riesling

(Germany-Rheingau)

RRP \$70.00

This is a bit closed and, therefore, not one of the 2019s that leap into your face. Yet, it has really impressive depth, is precisely proportioned and has a lot of finesse at the very long finish. Try to be patient, if you want the best from this delicate masterpiece. From organically grown grapes with Fair'n Green certification. Drink or hold.

95 points

jamesuckling.com



International wines – Wine 7

2019 Egon Muller Scharzhof Qualitats Riesling
(Germany-Mosel)

RRP \$110.00

For the estate-riesling category, this is an impressively complete wine with white and yellow-peach, ripe-gooseberry and fresh-mint aromas. Medium-dry, succulent and vibrant with a very long, clean, minty finish.

92 points

jamesuckling.com



International wines – Wine 8

2018 Donnhoff Oberhauser Brücke Riesling Spatlese
(Germany-Nahe)

RRP \$85.00

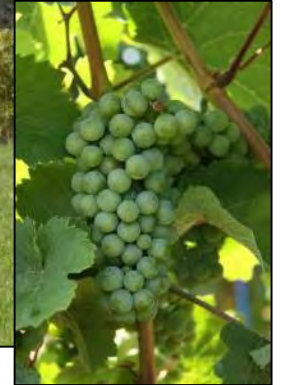
“This is a decadent sweet wine with bright dried peaches, white truffle and light honey. Tropical fruit, too. Full-bodied, dense and layered with beautiful intensity and richness. Sweet finish.”

94 points
[jamessuckling.com](https://www.jamessuckling.com)



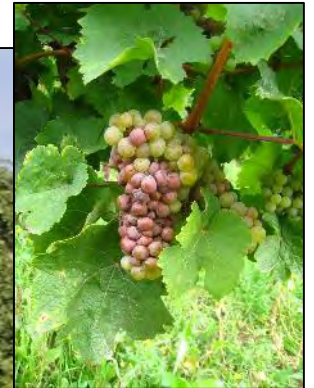


Department of
Primary Industries



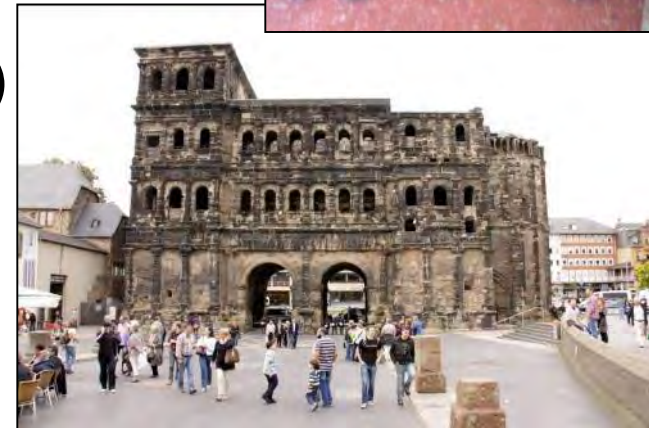
German grape growing regions and Riesling

Bruno Holzapfel

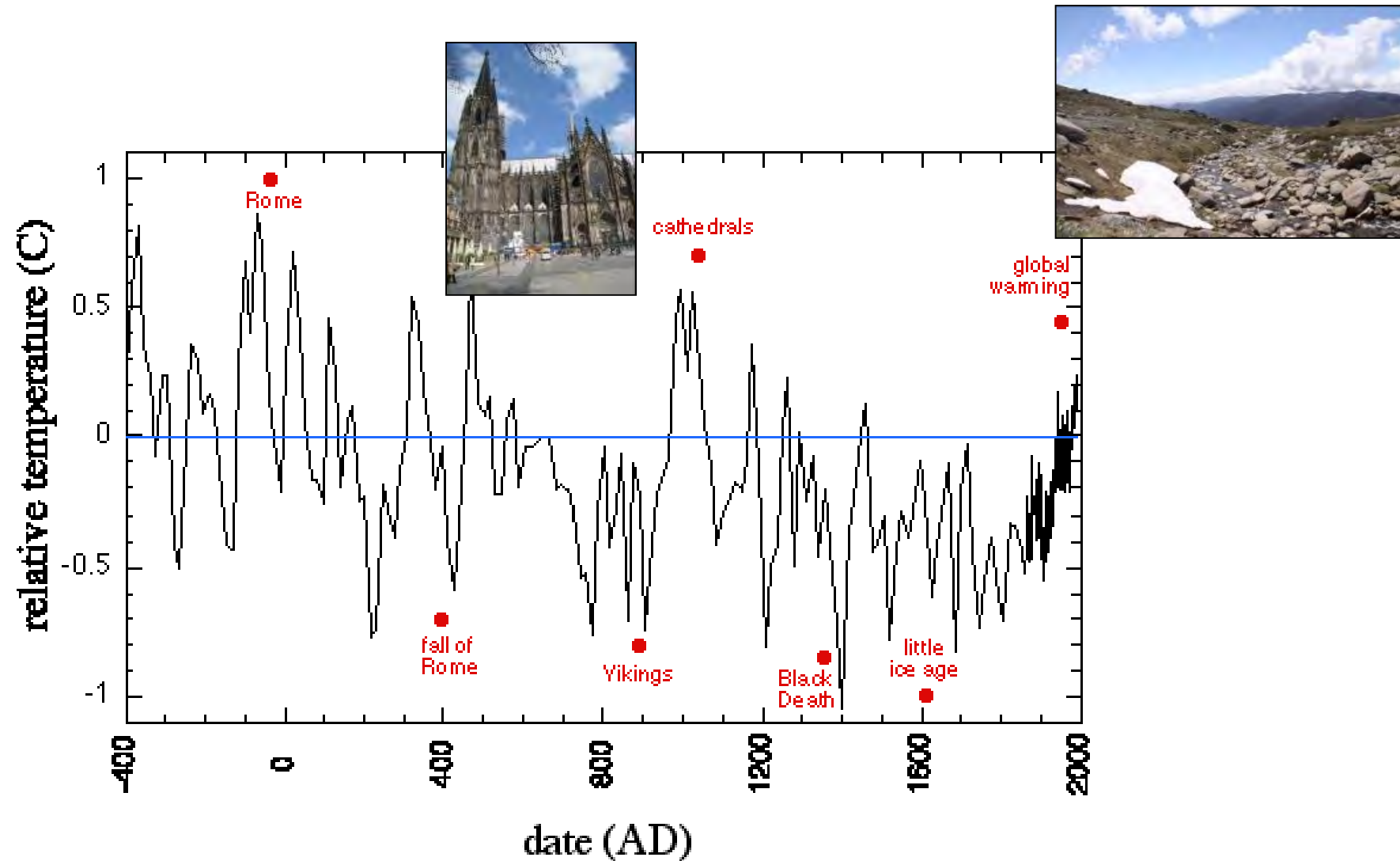


Germany and the Romans

- Teutons drunk mead (before 50BC)
- Caesar and Vercingetorix (58 to 52BC)
- Occupation of Germania/Gallia
- Augusta Treverorum – Trier (16BC)
- Titus Flavius Domitian (81-96AD)
- Marcus Aurelius Probus (276-282AD)
- Battle of Soissons (486AD)
- Vinum, mustum, Cellarium, Bacchus

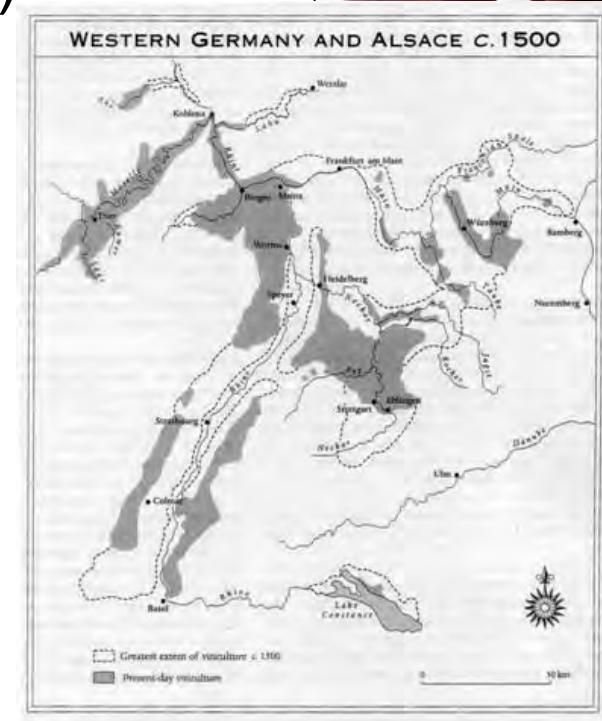
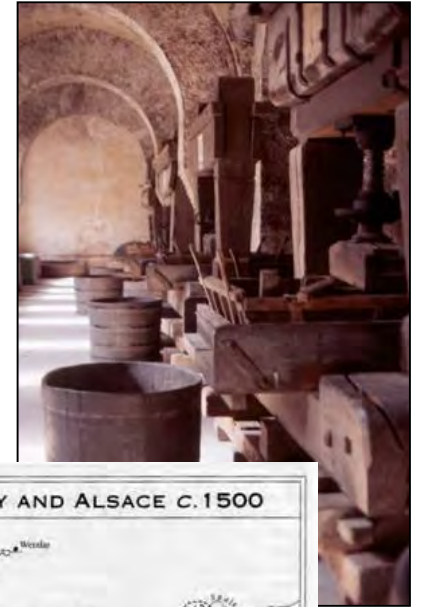


Temperatures over the last 2400 years



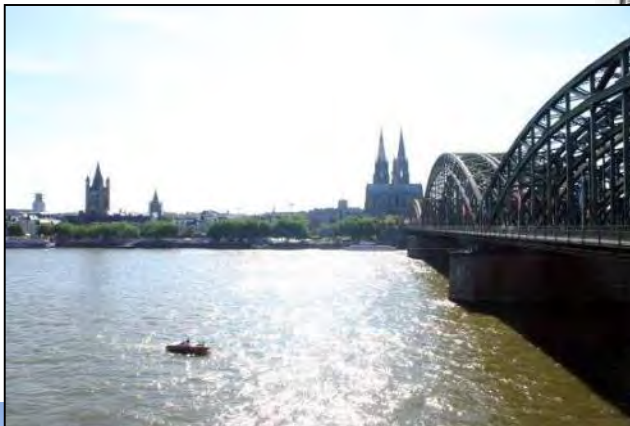
Christianity and the middle ages

- Charlemagne (812), peoples drink
- Alamannen, Burgunder, Franken
- Monasteries - Kloster Eberbach (1136AD)
- 150-200L per year/person
- Herbs and spices (also honey/fruit)
- Riesling (1435), winery in Rüsselsheim



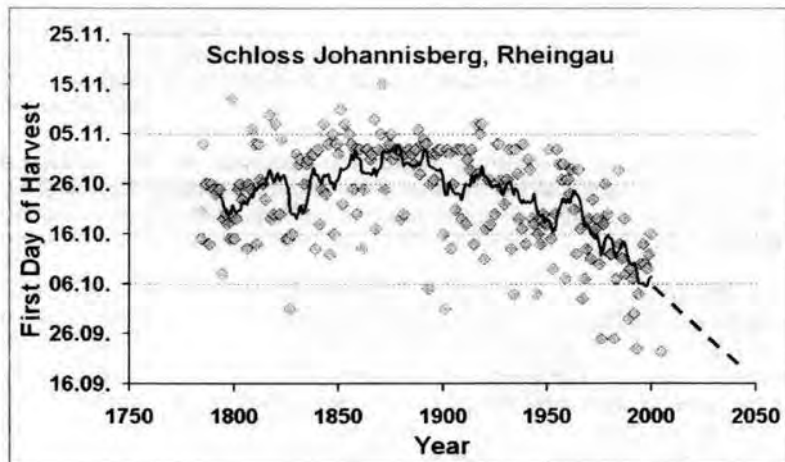
The 17th century and decline

- Largest production area (E and W Prussia)
- Thirty year war (1618-1648)
- Climate change (little ice age)
- Intensity of long-distance trade (Hanse)
- Popularity of beer



The 18th century and the messenger

- Giant wine barrel in Heidelberg (220,000L)
- Harvest permission, Johannisberg (1775)
- Kabinett, Spätlese, Auslese/noble rot
- Quality improvements (Archbishop of Trier)
- Secularisation and Napoleon



The 19th century and challenges

- Secateurs (1824), vine knife
- Birth of the ice wine, near Bingen (1830/31)
- Mineral nutrition (1847), vineyard ploughs (1880)
- Powdery mildew (1845), downy mildew (1878)
- Phylloxera (1865) – rootstocks (1872)
- Variety selection and training systems
- Breeding, Müller Thurgau (1882)
- Wine laws (1892), research and training



The recent times

- Wine inspector (1903)
- German wine institute, wine queen (1949)
- Expansion from the 1950's
- Yield and quality improvements
- Research and technology (vineyard/cellar)
- Regional specific (climatic limitations)
- Riesling renaissance (1995)
- Wine beats beer (2001), red wine boom (2006)





Grape production of Germany

- Main wine-producing climate - below 50th parallel
- Microclimate with moderate temperatures
- Vineyards are extremely small
- Area 103,000 hectares (2020)
- Maturity of grapes (must weight)
Oechsle scale: Qualitätswein 51-72, Kabinett 67-82, Spätlese 76-90, Auslese 83-100, Eiswein 110-128
- Production 764 million litres (2020)
- 13 regions, 6 in Rhineland-Palatinate (60%)

Grape varieties

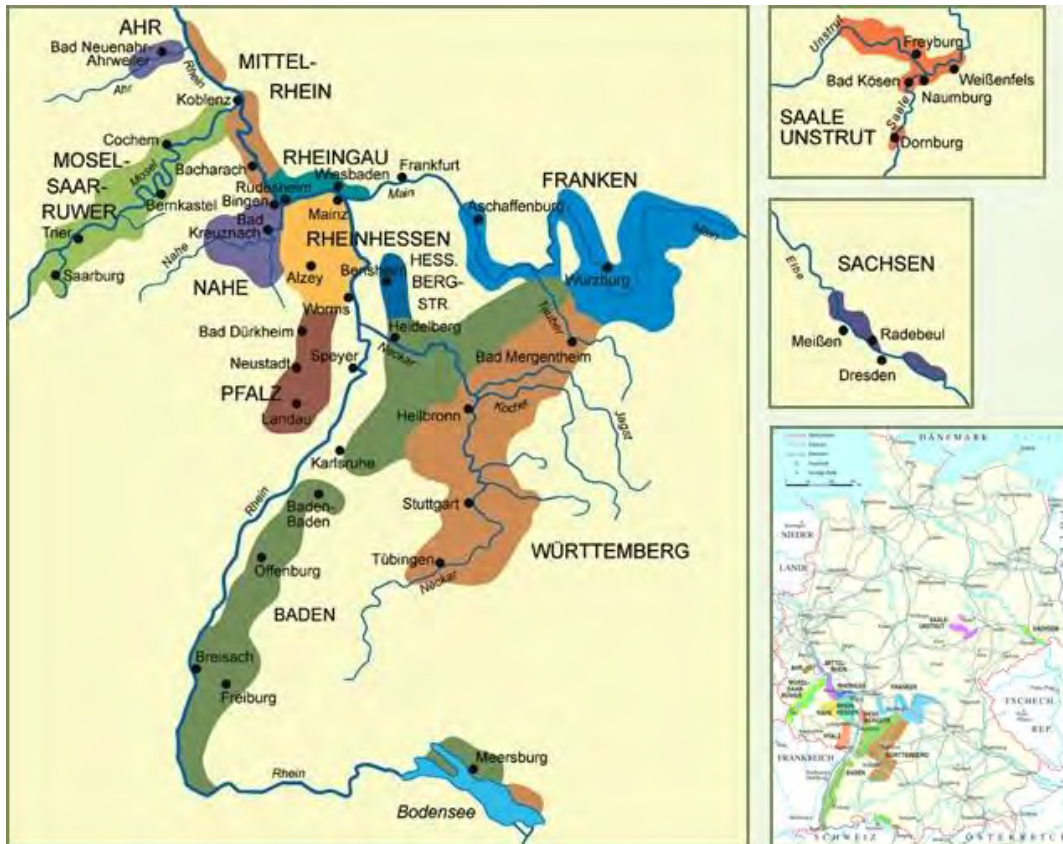


1. Riesling 23.4%, 24,150ha
2. Müller-Thurgau 11.1%, 11,453ha
3. Pinot Noir 11.3%, 11,660ha
4. Dornfelder 7.1%, 7,332ha
5. Pinot Gris 7.1%, 7,356ha
6. Pinot Blanc 5.7%, 5,922 ha
7. Silvaner 4.4%, 4,581ha
8. Blauer Portugieser 2.8%, 2,548ha
9. Chardonnay 2.3%, 2,277ha
10. Kerner 2.2%, 2,257ha

Sauvignon Blanc, Bacchus, Scheurebe, Gutedel, Traminer, Elbling, Huxelrebe...

Trollinger, Lemberger (Blaufränkisch), Schwarzriesling, Regent, Merlot, Cabernet Sauvignon, St. Laurent, Acolon, Domina, Cabernet Mito, Cabernet Dorsa, Frühburgunder, Dunkelfelder...

Wine regions of Germany



White grapes 67.3%
Red grapes 32.8%

13 regions, 6 in Rhineland-Palatinate (60%)
Reunification added the east German regions



Middle Rhine

465ha, 85% white wine
Riesling (65%), Pinot Noir
World heritage area (110km)



Ahr river

563ha, 85% red wine

Pinot Noir (early/late), Portugieser, Riesling (8.2%)

Mayschoß cooperative (1868)



Mosel-Saar-Ruwer

8,689ha, 91% white wine
Riesling (62.5%), Müller-Thurgau, Elbling
Oldest wine region (250km)

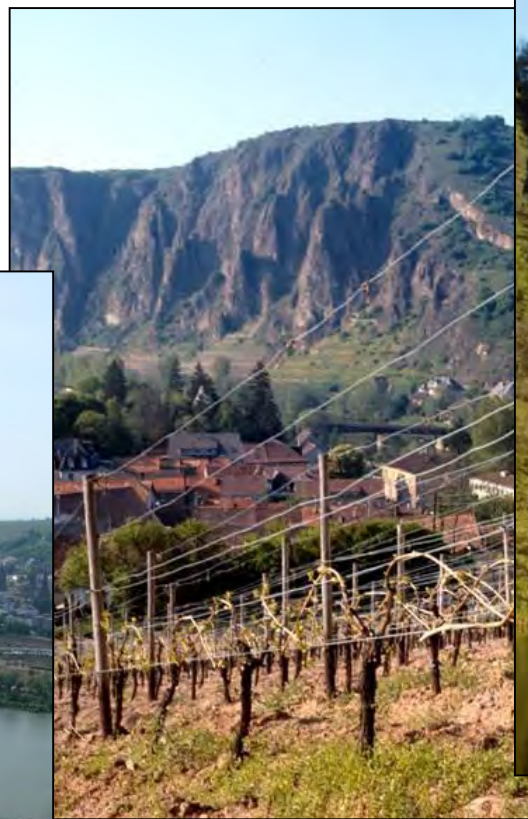


Nahe river

4,200ha, 76% white wine

Riesling (28.9%), Müller-Thurgau, Dornfelder

11th century, steep cliffs (60km)



Main/Franken

6,163ha, 81% white wine
Müller-Thurgau, Sylvaner, Riesling (5.5%)
Bocksbeutel, Celtic origin (1,500BC)



Württemberg/Neckar-Lake Constance

11,424ha, 68% red wine

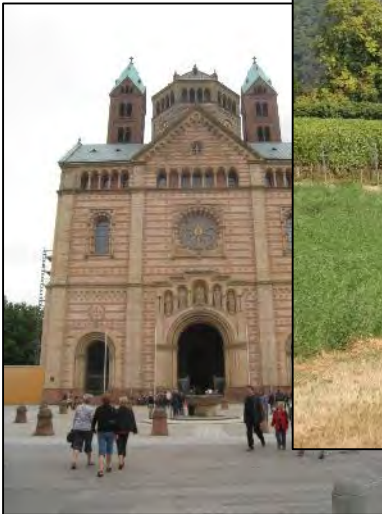
Trollinger, Riesling (18.5%), Schwarzriesling, Lemberger
Schillerwein (red/white mix)



Rhinehessen and Rhinepfalz

25,943ha, 72% white wine

Müller-Thurgau, Riesling (18.4%), Dornfelder,
Sylvaner, Portugieser, Pinot Noir



23,721ha, 66% white wine
Riesling (25%), Müller-Thurgau,
Dornfelder

Other regions along the Rhine

Baden/upper Rhine-Lake Constance

16,000ha, 56% white wine

Pinot Noir, Müller-Thurgau, Pinot Gris, Pinot Blanc, Riesling (6%)

Kaiserstuhl (emperor's seat), Otto III (980-1002)



Hessische Bergstrasse

463ha, 79% white wine

Riesling (39%), Pinot Noir, Pinot Gris



Saale Unstrut

819ha, 75% white wine

Müller-Thurgau, Pinot Blanc, Riesling (8.9%)



Sachsen

496ha, 82% white wine

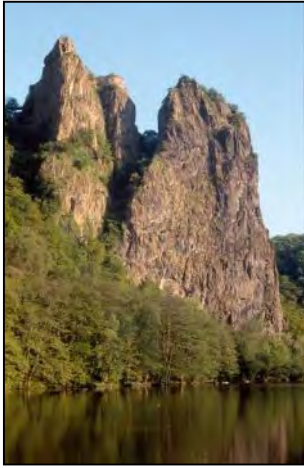
Riesling (13.5%), Müller-Thurgau, Pinot Blanc,

Rhinegau/upper Rhine

3,200ha, 86% white wine
Riesling (77.6%), Pinot Noir
11 collective sites, 120 individual sites
Johannesberg castle (Spätlese)



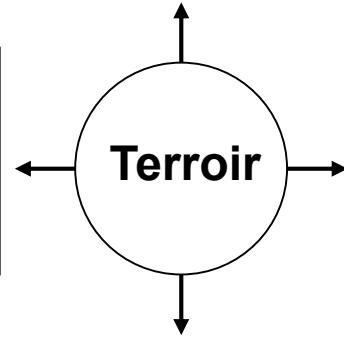
Aspects of Terroir



Environment: rock, soil,
climate, topography



Vineyard management:
quality strategy, pruning,
soil management,
nutrition, irrigation



Cellar management:
building structure

Regional influence:
history, culture, towns

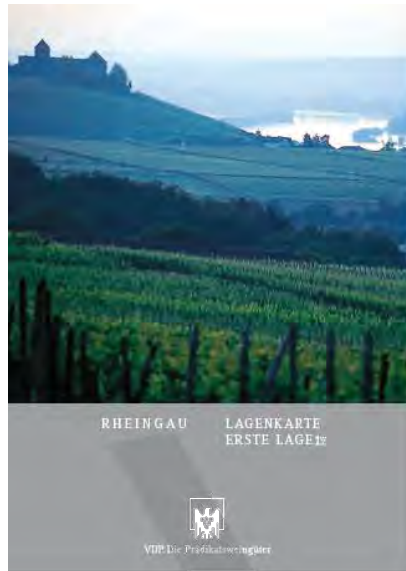




Classification pyramid (VDP)

- ERSTE LAGE - Wines from the best vineyards of Germany, absolutely finest, narrowly demarcated parcels with discernible terroir qualities (Erstes Gewächs).
- KLASSIFIZIERTE LAGE / ORTSWEIN / TERROIRWEIN - Only wines from classified sites of superior quality bear the name of a vineyard, small group of traditional vineyards that have a distinctive character.
- GUTSWEIN - High-quality wines that reflect regional character, at least 80% of an estate's holdings must be planted with traditional grape varieties typical of their region.

Rhinegau region and vineyards



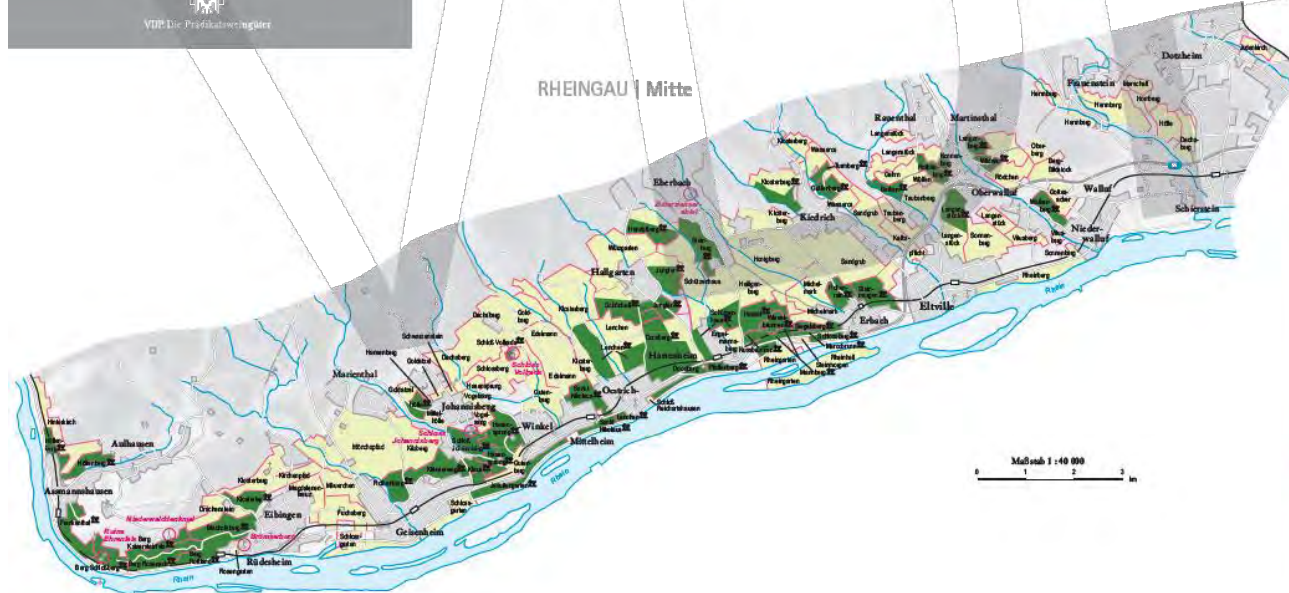
RHEINGAU | West



RHEINGAU | Ost



RHEINGAU | Mitte



RHEINGAU | Übersicht



LEGENDE

- Grenzlagegrenze
- VDP ERSTE LAGE
- weitere Reblagen
- Sechsenstrichigkeit

KARTOGRAPHIE
aus dem Titel „Weinlagen Deutschland“, erschienen im HALLWAG Verlag
mit freundlicher Genehmigung der GRAF UND UNZER VERLAG GmbH, München
Stand 2008

Schloss Johannesberg

- The castle on the 50th parallel north (50ha, Slope up to 45°, exposition south, 182m).
- The typical soil composition is Taunus quartzite beneath a topsoil layer of loam-loess.
- Since over 300 years, Riesling has been the only varietal cultivated in the vineyard.
- The soil, together with the favourable climatic conditions and long viticultural tradition.
- The wines that reflect the inimitable character of their origin, being a grand monument to the diversity of Riesling.





Summary and conclusions

- Grape production goes back to the Romans, with changes and challenges through to today.
- The majority of the 13 wine regions are along the Rhine River and its tributaries.
- Regions have several collective sites and numerous individual sites.
- Vineyard location impacts on ripeness and grape quality is assessed by maturity (eg. Spätlese).
- Ecological vineyard management and cellar procedures becoming important.
- Riesling character is influenced by the soil and a number of variations: Kabinett, Spätlese, Auslese or even Ice wine.

Wine Australia for Australian Wine

Australian Riesling

Peter Bailey

May 18, 2022

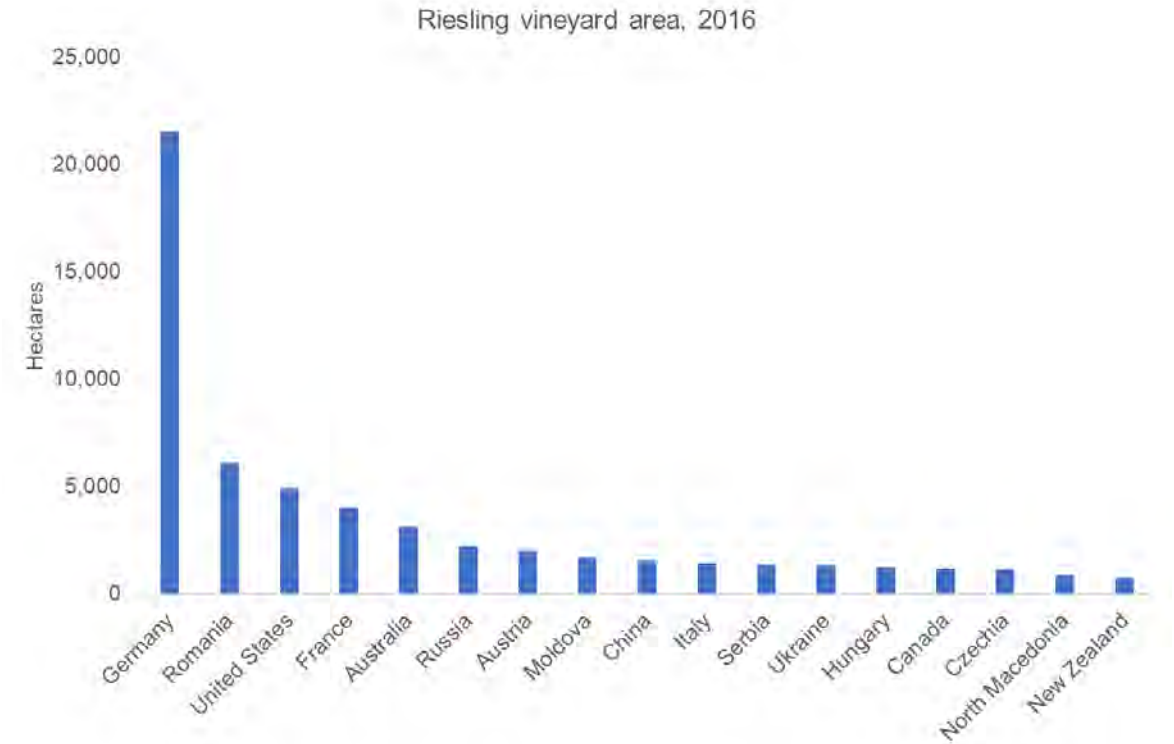
Outline

- Riesling production globally
- Riesling production in Australia
- Exports of Australian Riesling
- Trends in the domestic market



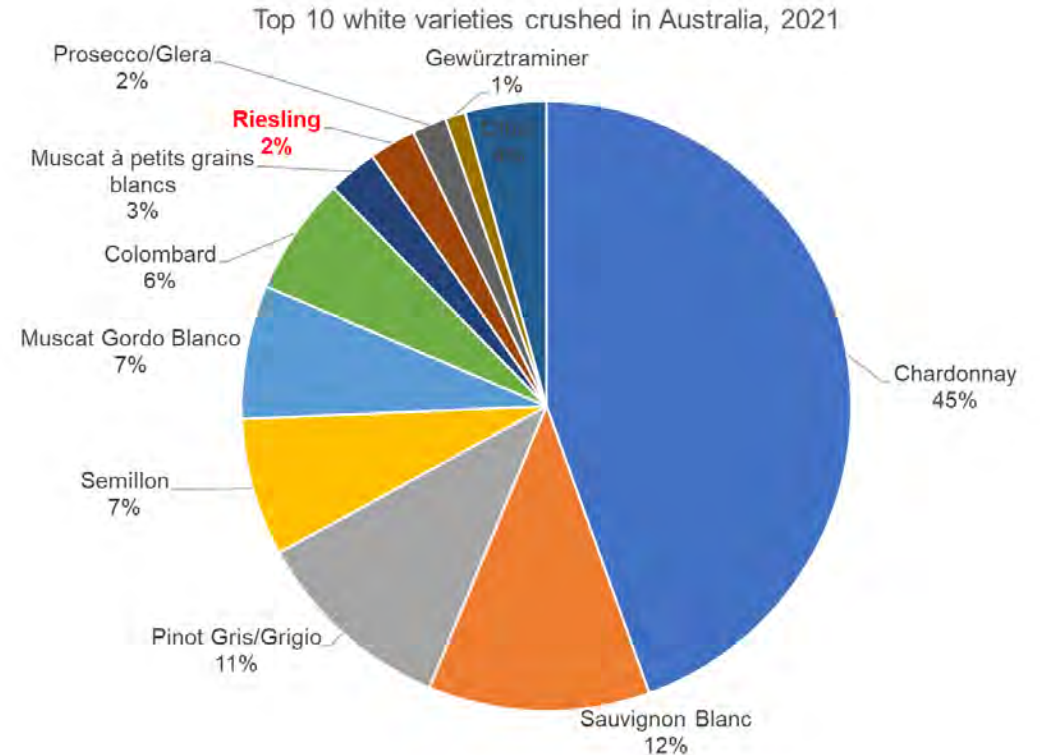
Riesling globally

- Globally, there were almost 60,000 hectares of Riesling under vine in 2016
- 14th most planted variety and 5th most planted white
- Germany number one with 21,540 hectares
- Australia is number five with 3,100 hectares



Riesling's place in Australia

- Riesling as a long history in Australia, dating back to 1837
- It was the most popular white wine in Australia in the 1960s through to the 1980s
- The surge in popularity of Chardonnay coincided with the decline of Riesling from being Australia's most popular white wine
- Riesling now the 7th most crushed white in Australia



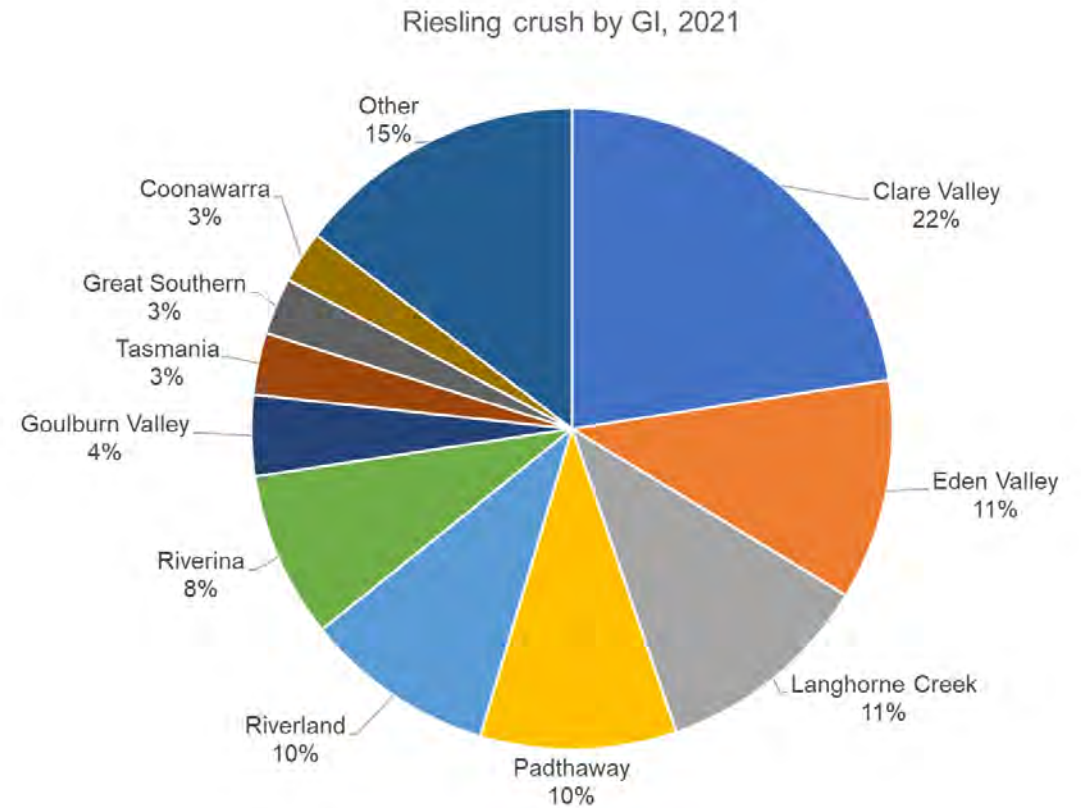
Riesling production and prices over time

- The national crush of Riesling in Australia has fallen over time – 35,000 tonnes in 2008 to 21,000 tonnes in 2021
- Ten-year average of 22,500 tonnes
- Over this time, the average purchase price has risen from \$594 per tonne to \$1,096 per tonne



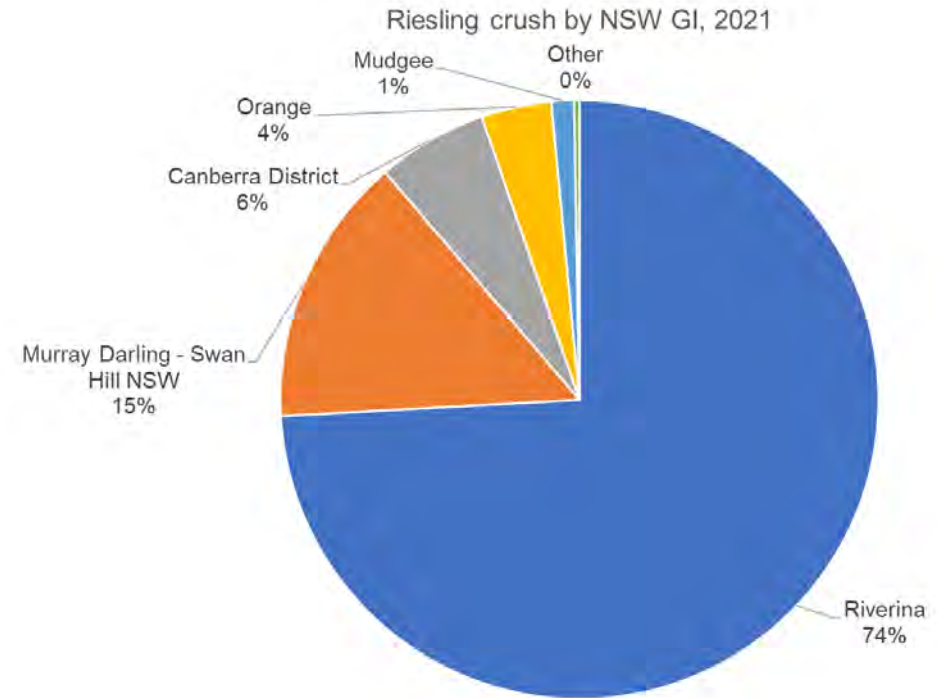
Where is Riesling produced in Australia?

- South Australia produced 72 per cent of the national Riesling crush in 2021
- Only five regions crushed more than 2,000 tonnes
- Clare Valley is #1 with 4,800 tonnes
- Eden Valley and Langhorne (each around 2,400 tonnes)
- Padthaway and Riverland (around 2,100 tonnes)
- Other regions include Riverina, Goulburn Valley, Tasmania, Great Southern



Where is Riesling produced in NSW?

- NSW crushed 2,430 tonnes of Riesling in 2021 (11 per cent of national crush)
- Riverina accounted for just under three-quarters of the Riesling in NSW in 2021 (1,800 tonnes)
- Murray Darling – Swan Hill (355 tonnes)
- Canberra District (145 tonnes)
- Other NSW GIs such as Orange and Mudgee crush less than 100 tonnes



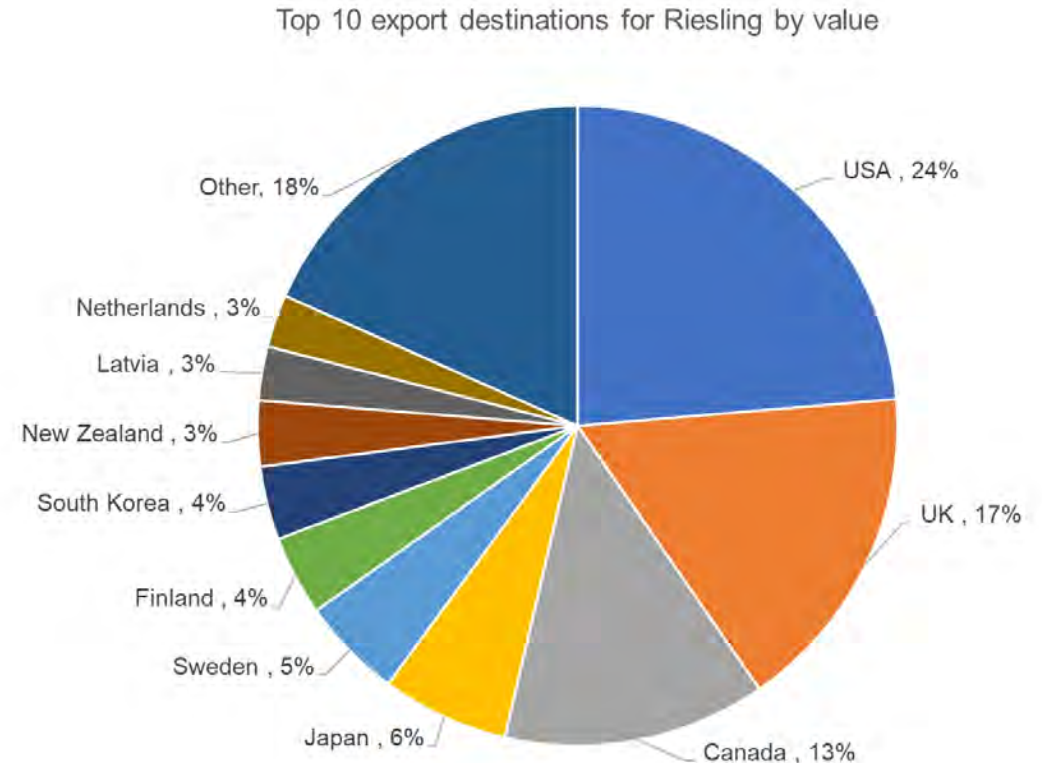
Riesling exports over time

- In the 12 months ended March 2022, Australia exported 3.6 million litres (400,000 cases) of Riesling valued at \$18.4 million and average value of \$5.09 per litre
- Volume and value have been in decline since 2017, in line with the decline in Australian Riesling production
- Exports peaked in the last decade at just over \$25 million and 6.8 million litres (356,000 cases)
- This represents lost sales of \$7 million per annum
- While volume has declined, the average value has risen over the decade, although has fallen in the last two years



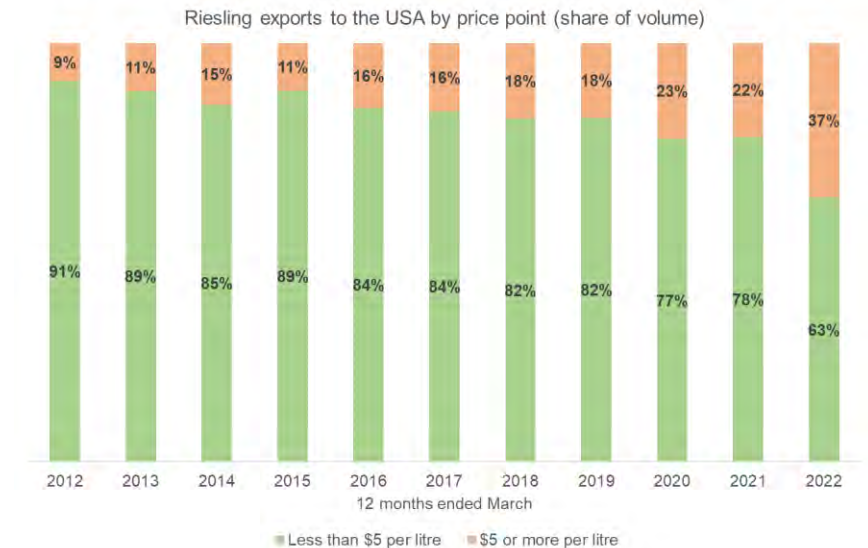
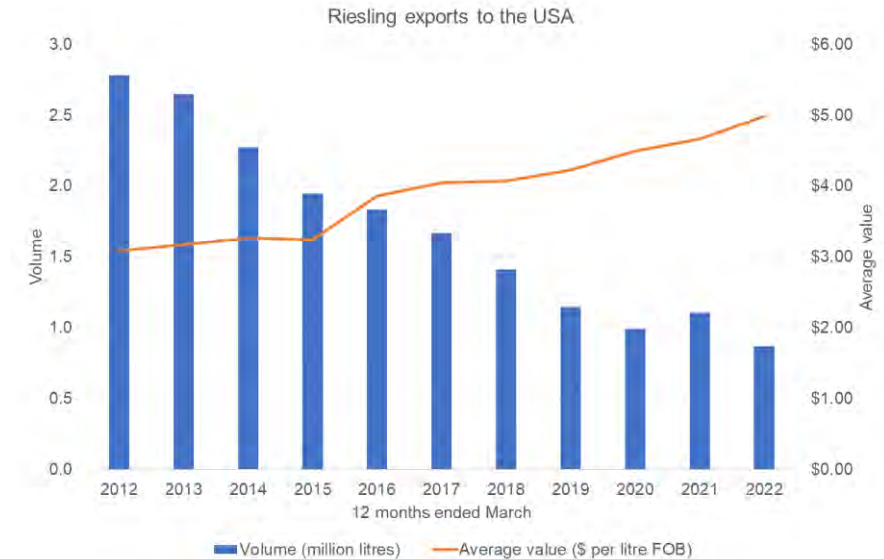
Riesling exports by market

- Australian Riesling was exported by 242 companies to 71 markets in last 12 months
- Top three accounted for more than half the value
- USA has been the number one destination for over 15 years
- The UK has generally been number two over the same period
- Canada has been at number three
- Japan in the top five for the first time
- South Korea the big mover, jumping from 29 to 7 over the last five years
- New Zealand also climbed into the top ten in 2022



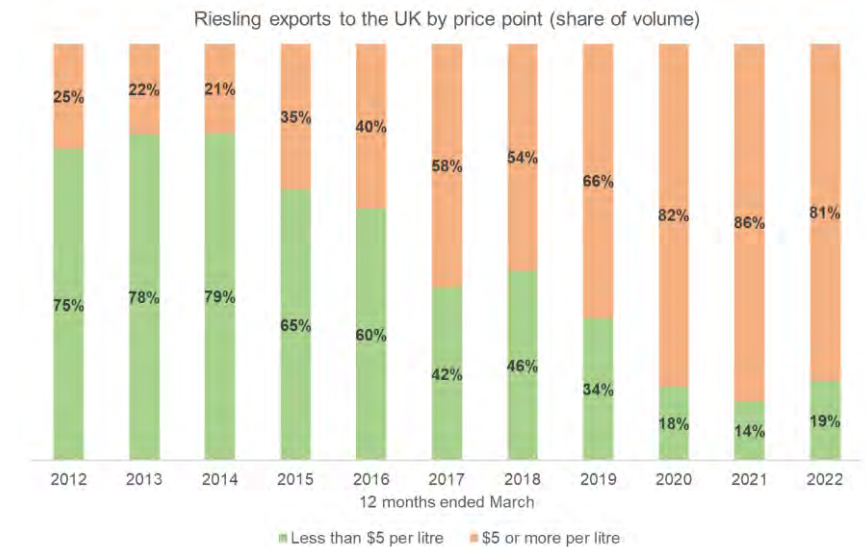
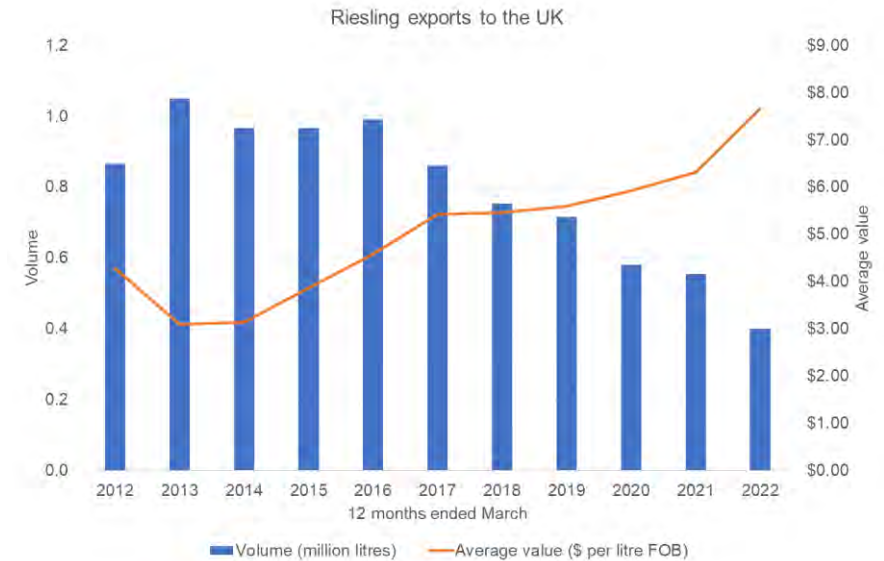
Riesling exports to the USA

- Riesling exports to the USA declined by 16 per cent to \$4.3 million and in volume by 21 per cent to 870,000 litres (just under 100,000 cases) in 12 months ended March 2022
- Volume has been in steady decline over the last decade
- Average value increased by 7 per cent to \$4.99 per litre (roughly US\$15 per bottle retail) and has been increasing for seven consecutive years
- Growth in average value reflects the increase in the share of exports at \$5 or more per litre over the last decade – from 9 per cent in 2012 to 37 per cent in 2022
- Riesling is the fifth white wine of choice among US wine drinkers and less are drinking it – 30 per cent in 2018 v 28 per cent in 2021 (Wine Intelligence) – Chardonnay #1 at 44 per cent



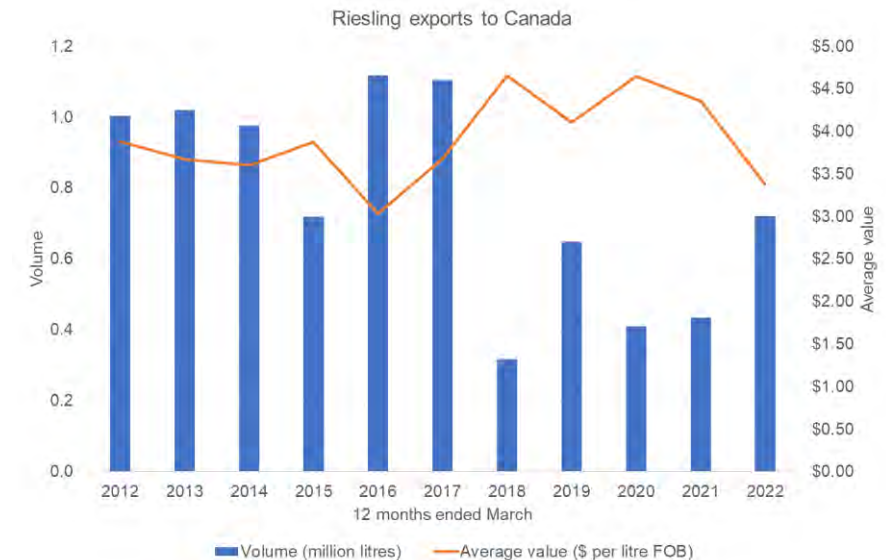
Riesling exports to the UK

- Riesling exports to the UK declined by 13 per cent to \$3.1 million and in volume by 28 per cent to 400,000 litres (44,000 cases) in the 12 months ended March 2022
- Volume has been in steady decline over the last decade, peaking at just 1 million litres
- Average value increased by 21 per cent to \$7.66 per litre (roughly £7-8 per bottle retail) and has been increasing for nine consecutive years
- Growth in average value reflects the increase in the share of exports at \$5 or more per litre over the last decade – from 25 per cent in 2012 to 81 per cent in 2022
- Riesling is the sixth white wine of choice among UK wine drinkers and less are drinking it – 19 per cent in 2017 v 16 per cent in 2021 (Wine Intelligence) – Sauvignon Blanc is #1 with 57 per cent



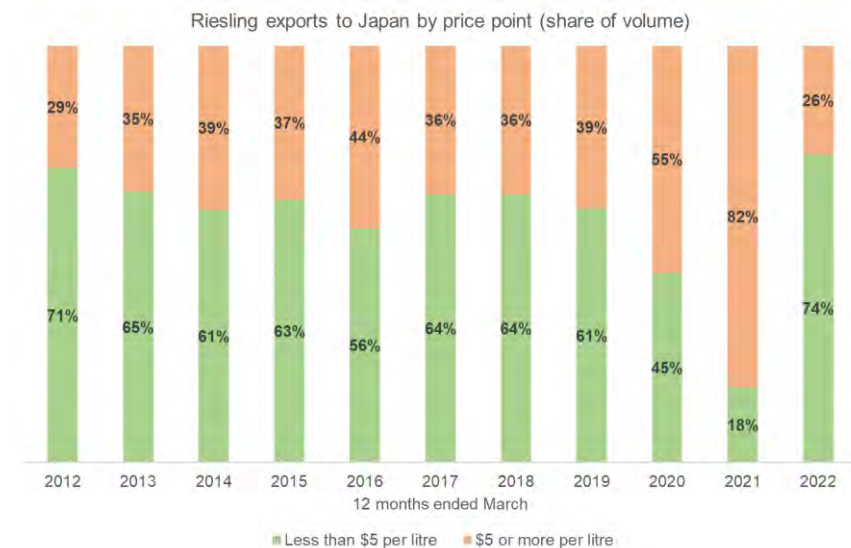
Riesling exports to Canada

- Riesling exports to Canada increased by 28 per cent to \$2.4 million and in volume by 65 per cent to 720,000 litres (80,000 cases) in 12 months ended March 2022
- Volume is lower than it was a decade ago but has increased in last two years, off a small base
- Average value decreased by 22 per cent to \$3.38 per litre (roughly C\$8 per bottle retail) and has been volatile over recent years
- Over 90 per cent of Riesling exports to Canada is priced at less than \$5 per litre. While half the exports are bottled, a quarter are soft-packs and a quarter is shipped in bulk
- 85 per cent to British Columbia, 12 per cent to Ontario
- Riesling is the fourth white wine of choice among English-speaking Canadians drinkers and less are drinking it – 37 per cent in 2017 v 31 per cent in 2020 (Wine Intelligence) – Pinot Gris/Grigio is #1 with 49 per cent



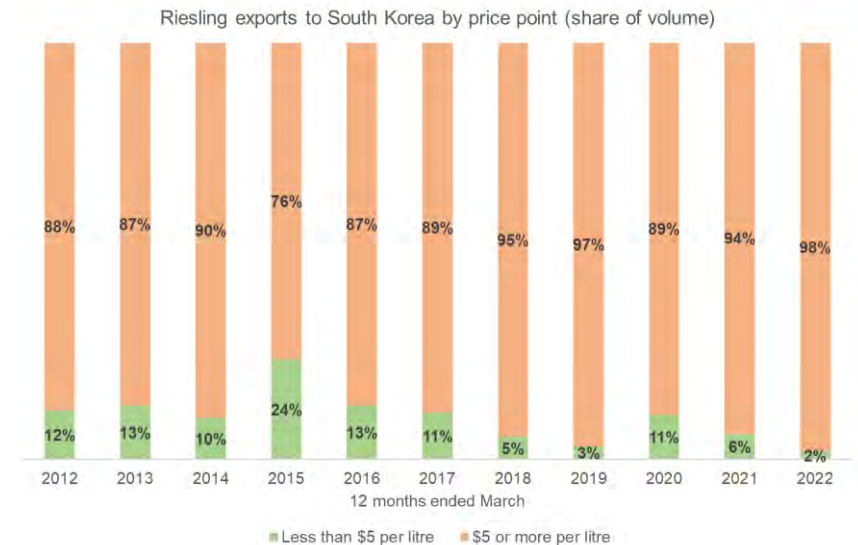
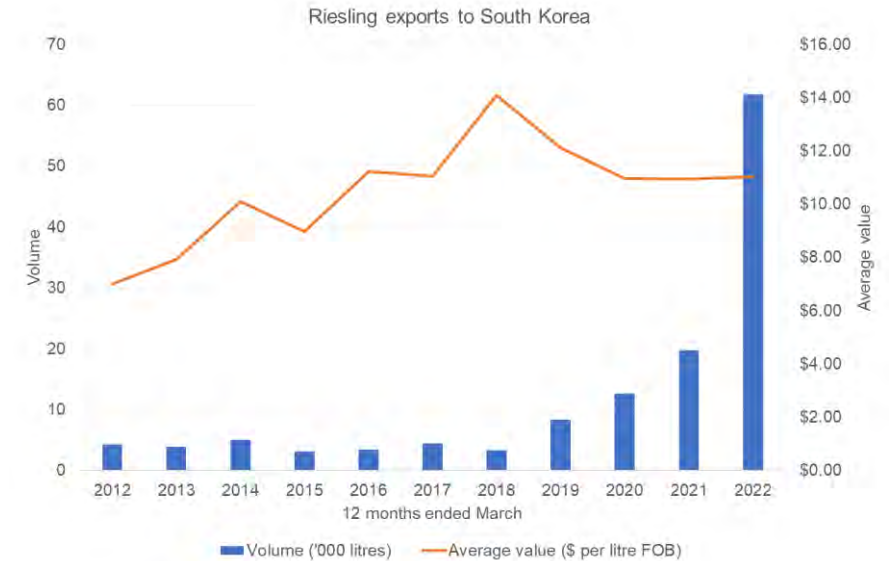
Riesling exports to Japan

- Riesling exports to Japan increased by 20 per cent to a record \$1.2 million and in volume by 53 per cent to 228,000 litres (25,000 cases) in the 12 months ended March 2022
- Volume had been stable until surging in 2022 – zero tariff on Australia bottled exports may have been a factor
- Average value decreased by 22 per cent to \$5.16 per litre (roughly ¥865 per bottle retail) and has been relatively stable over the decade, apart from a spike in 2019
- About three-quarters of Riesling exports to Japan is priced at less than \$5 per litre. The biggest increase in volume has been in this segment
- Riesling is the fourth white wine of choice among Japanese wine drinkers – 13 per cent in 2021 (Wine Intelligence) – Chardonnay is #1 with 50 per cent



Riesling exports to South Korea

- Off a small base, Riesling exports to South Korea trebled in value and volume to a record \$700,000 and 62,000 litres (7,000 cases) in 12 months ended March 2022
- Zero import tariffs on Australian wine and exporters seeking markets outside of China are contributing factors
- The average value increased by 1 per cent to \$11 per litre (roughly ~~¥~~\$22,000 per bottle retail) and the recent decline has stabilised over last three years
- 98 per cent of Riesling exports to South Korea is priced at \$5 or more per litre. Just over half is at \$10 or more per litre
- Riesling is the sixth white wine of choice among South Korean wine drinkers – and is stable at 13 per cent in 2021 (Wine Intelligence) – Sauvignon Blanc is #1 at 44 per cent



Riesling in the domestic market

- According to IRI MarketEdge, in 2021, sales of Riesling in the domestic off-trade market totalled \$75 million, similar to 2020 but up from \$68 million in 2019
- The average price paid for Riesling has also grown from \$14.51 per bottle to \$15.36 per bottle
- Volume has fallen from 3.9 million litres in 2020 to 3.6 million litres in 2021 but still higher than in 2019 at 3.5 million litres
- The healthy average price reflects the positioning of Riesling in Australia's domestic market. By volume, the biggest segment for Riesling is between \$20 and \$30 per bottle, with a third of total Riesling sales and is driving growth. The next biggest is \$15 to \$20 per bottle, with just under a quarter share
- Riesling is the fifth ranked white wine by sales in the domestic off-trade market



Riesling in the domestic market by GI region label claim

- Australia dominates the Riesling category within the local domestic market, in Australia with a 97 per cent share of value
- Clare Valley (46 per cent) and Eden Valley (15 per cent) are the two dominant regions for Riesling sales in the domestic market and both regions recorded sales growth between 2019 and 2021
- Other regions to record growth off much smaller bases over the period included Great Southern, King Valley, Canberra District, Henty, Yarra Valley and Mudgee
- SEA, Orange, and Hilltops saw sales decline



Summary

- World's fifth most planted white variety
- Australia is the fifth biggest Riesling producer
- South Australia Australia's biggest producer, NSW has 11 per cent of the national crush
- While Australian production has fallen, grape prices have risen
- Exports have declined in line with supply
- USA and UK the biggest destinations but volume has been declining
- Strong growth to smaller destinations such as Japan and South Korea





Riesling clones: observations from NSW vineyards and opportunities for genetic improvement.



Nick Dry

**FOUNDATION
VITICULTURE**



Presentation outline:

1. Riesling clones influence on yield and yield components.
2. Comments on commercial performance of Riesling clones in NSW vineyards.
3. Opportunities for Riesling improvement



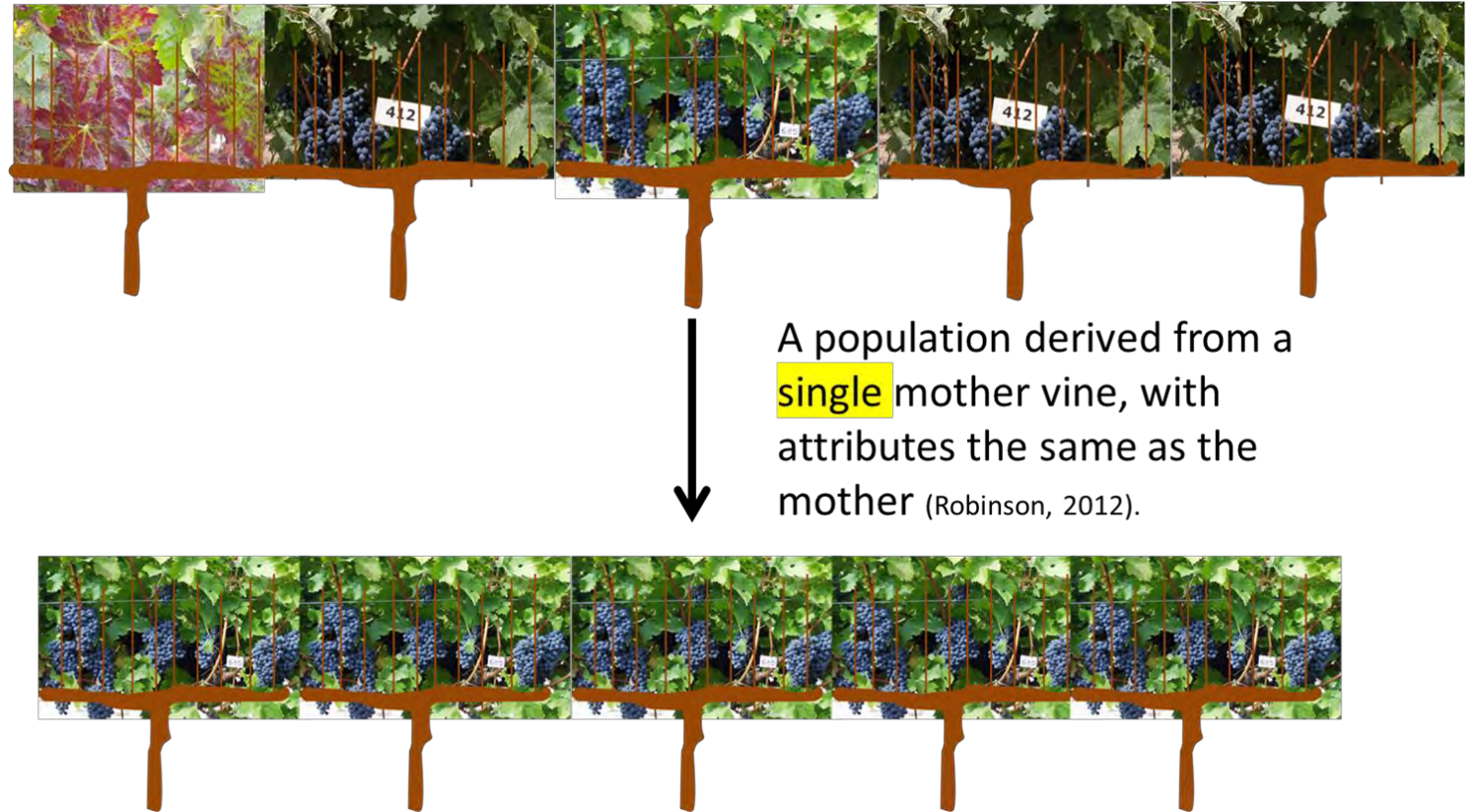
Nick Dry

**FOUNDATION
VITICULTURE**



What is a grapevine clone?

FOUNDATION VITICULTURE

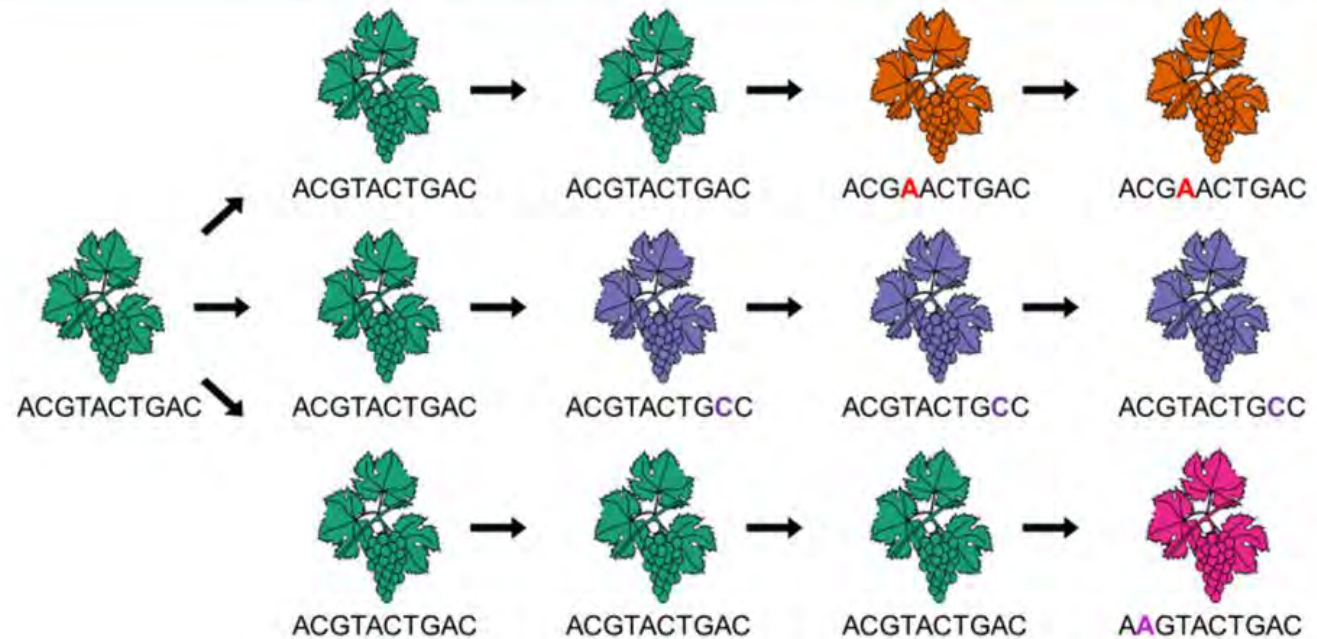


- ➔ All vines in the vineyard are genetically identical.
- ➔ More predictable outcomes.

How do grapevine clones develop?

**FOUNDATION
VITICULTURE**

Today's clones are yesterday's mutations



- Image courtesy of Anthony Borneman from AWRI.
- Excellent presentation on (Chardonnay) clones by Anthony available at ➔ <https://www.youtube.com/watch?v=nUzuKYL99U>

Why do we
use clones?



FOUNDATION VITICULTURE

- Avoid the problems associated with mass selection.
 - Known agronomic attributes means:
 - Appropriate match to site (climate/soils/disease pressure).
 - Appropriate match to end-product objectives (style/yield).
- ➔ Options for winemakers and viticulturists.

Riesling clones and synonyms

Clone	Synonyms	Origin
198 Gm	D2V2	Geisenheim, Germany
239 Gm		Geisenheim, Germany
GM110 Gm	D2V3	Geisenheim, Germany
I10V15	N90, Clone 90, FPS12	Neustadt, Germany
BVRC8, BVRC14	None	Barossa Valley trials
Pewsey Vale Selection	PV Selection	Eden Valley
McWilliams Selection	None	Hunter Valley?

FOUNDATION VITICULTURE

Total of 30 selections represented in the SAVIA Collection

116 Riesling clones registered in 2015- 68 of the Riesling clones came from Geisenheim (source: *'Grapevine Breeding Programs for the Wine Industry'*)

Only 8 registered clones in France- 7 of these registered from 2006 onwards (source: ENTAV-INRA catalogue)

The influence of clones on: Yield components

FOUNDATION VITICULTURE

From: McCarthy, M. (1988) Clonal comparisons with Pinot Noir, Chardonnay, Riesling clones. In 'Proceedings of 2nd International Symposium for Cool Climate Viticulture and Oenology'. Auckland.

Table 3. Yield and maturity components for five clones of Riesling for harvest years 1985 to 1987.

	Clone					
	S A 140	BVRC 8	BVRC 17	Gm 198	Gm110	L.S.D. (5%)
Fruit weight (kg per vine)						
1984	9.0	9.5	9.0	9.5	7.5	N.S.
1985	12.5	12.4	13.2	12.1	11.7	N.S.
1986	10.0	10.1	9.5	10.3	10.2	N.S.
Number of bunches						
1984	90	91	80	93	81	N.S.
1985	121	120	111	120	119	N.S.
1986	114	110	99	108	114	N.S.
Bunch weight (g)						
1984	100.7	103.8	114.4	102.7	89.9	11.4
1985	104.9	104.3	121.2	100.9	98.9	11.4
1986	87.0	92.0	96.2	95.5	87.8	N.S.
Berry weight (g)						
1984	1.1	1.1	1.2	1.1	1.1	N.S.
1985	1.1	1.1	1.1	1.0	1.1	N.S.
1986	1.1	1.1	1.2	1.1	1.1	N.S.
Berries per bunch						
1984	91	90	98	97	82	9
1985	99	97	112	99	90	9
1986	78	81	84	88	81	9

G 110

G 198

M^cWILLIAMS

PEWSEY VALE

**LIMITED DIFFERENCES BETWEEN
COMMON CLONES IN TERMS OF
YIELD COMPONENTS → FOCUS
FOR SELECTING CLONES SHOULD
BE ON SENSORY CHARACTERS**

Neustadt 90
source: K. Helm

198 Gm
source: K. Helm

McWilliam's
source K. Helm

Pewsey Vale
Source: K. Helm

Focus on:

McWilliam's
Selection

**FOUNDATION
VITICULTURE**

NSW observations:

- McWilliams' (circa 1970-1980's) does not perform as well as 198Gm and Pewsey Vale
- Fairly neutral
- Performs well above 700m, but lacks top-end rose petal/rose-water characters
- Less botrytis compared with 110 Gm.

Focus on:

198 Gm/
D2V2

**FOUNDATION
VITICULTURE**

From Schmid, J. et al. (2009)*

198 Gm is characterised by:

- a more moderate yield level
- the production of wine of high quality with a very fine acid structure.
- volatile aromas of rose and citrus and for this reason the wine itself is especially elegant and aromatic

NSW observations:

- Balance, flavour and strong aromatics
- Very reliable for yield
- Preferred clone based on acidity retention and good flavour using for new plantings.
- Preferred clone along with PV and 110Gm

*Schmid, J. Manty, F., Lindner, B. (2009) Geisenheimer Rebsorten and Klone.

Focus on:

Pewsey Vale Selection

**FOUNDATION
VITICULTURE**

From the Yalumba Nursery Clone Catalogue:

- a mass selection of Riesling from Pewsey Vale vineyard (Eden Valley)
- The Pewsey Vale Selection is known to produce moderate yields and well-balanced wines.
- Based on field assessments in 2010, the Pewsey Vale Selection produces flavours of grapefruit, lemon/ lime and lemon sherbet with soft, well-balanced acid and minerality.

NSW observations:

- Lower yields and very good quality- goes into top tier product with a small proportion of the D2V2 (198Gm).
- Less aromatic compared with GM198, but beautiful balance and when it comes together it beats the GM198.....PV responds to a good site.

Focus on:

110-18
Gm/D2V3

**FOUNDATION
VITICULTURE**

From Schmid, J. et al. (2009)*

110-18 Gm is characterised by:

- Average yields.
- good quality with typical Riesling acid levels.
- It has moderate expression of volatile aromas.
- The wine is closer to a fine style of Riesling and it will develop kerosene notes with bottle-age.

From: Bettiga, L (2003) Riesling. Wine Grape Varieties in California

'This clone has an extremely fruity, slightly muscat flavor, and in warmer sites it is regarded as not typical of German Riesling wines'

NSW observations:

- Performs very well at 900m, with really good flavours, but is slightly biennial in cropping behaviour and gets botrytis even in dry years.

*Schmid, J. Manty, F., Lindner, B. (2009) Geisenheimer Rebsorten und Klone.

Focus on:

239 Gm

**FOUNDATION
VITICULTURE**

From Schmid, J. et al. (2009)*

239 Gm is characterised by:

- yields well below the average.
- very high-quality potential.....a very fine acid structure.
- the highest levels of volatile esters in the Geisenheim Riesling clone trials.
- Is (still) the most widely planted clone in Germany (pers. comm Manfred Stoll)
- 6 sub-types available.

NSW observations:

Planted on shale- Pretty 'ordinary' quality,- average intensity, susceptible to botrytis- but grower concedes it could be site, so have included this clone in new vineyard planting.

➔ Given the popularity of this clone in Germany why has it not been more widely planted in NSW?

*Schmid, J. Manty, F., Lindner, B. (2009) Geisenheimer Rebsorten and Klone.

Focus on:

I10V15/
Neustadt 90/
N90

**FOUNDATION
VITICULTURE**

From the Yalumba Nursery Clone Catalogue:

- I10V15 also known as FPS12, Clone 90 or Neustadt 90,
- this clone was originally sourced from Neustadt in Pfalz region
- It was identified as a high-quality clone among German researchers and was imported into Australia under the name I10V15 in 1971.
- It is known to be particularly cold tolerant and also disease resistant.

NSW observations:

2017 planting and first crop observations:

‘Seems to be earlier ripening compared to adjacent Pewsey Vale Selection- (1 baume ahead this year and last year)’

Clone selection summary

FOUNDATION VITICULTURE

Both 198Gm and Pewsey Vale selection have been identified as clones with consistent quality outcomes in NSW

- 198 Gm = aromatics
- Pewsey Vale = acid balance

239Gm- high quality potential, most widely planted clone in Germany....

I10V15- lesser known, but showing potential.

Riesling improvement efforts in Germany

**FOUNDATION
VITICULTURE**



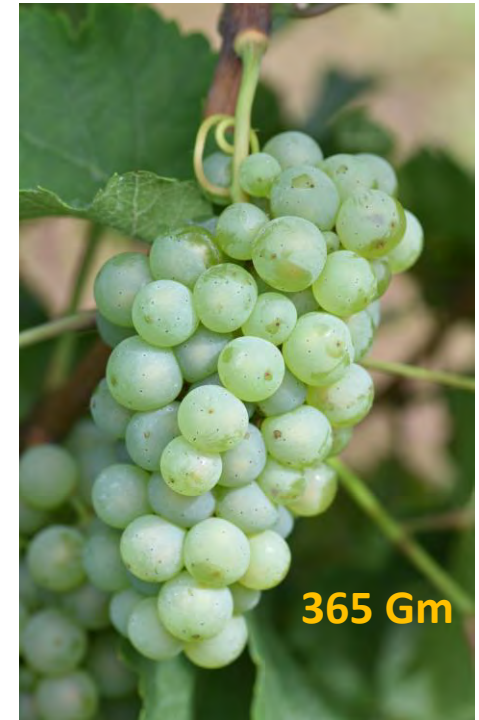
Geisenheim Institute consider themselves as ‘The Riesling Selection Institution’

Collection of almost 1000 variations of Riesling, which is the largest Riesling collection in the world.

Riesling improvement efforts in Germany

FOUNDATION VITICULTURE

- Next or new generation Riesling clones will be series 300.
- New selection's taken from across many regions from pre-clonal vineyards (earlier than 1950's planted).
 - Significant differences observed in both yield components and flavour.
 - Manfred's preference: 326Gm and 365Gm



For more information: <https://www.traubenshow.de/informationen-zu-rebsorten/ertragsrebsorten-auswahl-in-deutschland-a-z/121-r/riesling-weisser/702-klone?msclkid=837fe675bcec11ecb71077eeda6276df>

Riesling improvement opportunities in Australia

**FOUNDATION
VITICULTURE**

Are we satisfied with the performance of the commonly available clones?

What attributes are we looking for?

Are the desired attributes available in the pool of genetics we have in Australia?

- Heritage selection trials
- Less commonly planted selections i.e the 20 or so clones in the SAVIA collection that haven't been evaluated

Or do we need to import more clones?

The National Grapevine Collection (NGC)

FOUNDATION VITICULTURE

‘Start clean and true.....

via access to high-health and identity verified collections and source blocks

.....stay clean and true

through the supply chain **via an assurance** program that is based on science’.

Other NGC activities:

- A national register of varieties, clones and rootstocks.
- Facilitation of variety, clone and rootstock trials.
- Strategic importation of industry critical cultivars



Nick Dry

**FOUNDATION
VITICULTURE**

Sources and further reading:

- Bettiga, L (2003) Riesling. Wine Grape Varieties in California, University of California, Agriculture and Natural Resources Publication 3419
- ENTAV-INRA catalogue <https://plantgrape.plantnet-project.org/en/cepage/Riesling>
- Grapevine Breeding Programs for the Wine Industry, Editor(s): Andrew Reynolds. Woodhead Publishing. In Woodhead Publishing Series in Food Science, Technology and Nutrition, 2015.
- Schmid, J. Manty, F., Lindner, B. (2009) Geisenheimer Rebsorten and Klone. <https://www.traubenshow.de/informationen-zu-rebsorten/ertragsrebsorten-auswahl-in-deutschland-a-z/121-r/riesling-weisser/702-klone?msclkid=837fe675bcec11ecb71077eeda6276df>
- Yalumba Nursery Clone Catalogue



Nick Dry

**FOUNDATION
VITICULTURE**

Acknowledgements:

Caleb Wearne- Nick O'Leary Wines

Dan Shaw- Phillip Shaw Wines

Greg Mader- Clonakilla

Jacob Stein- Robert Stein

Justin Jarret- Seasaw Wines

John Davis- Peppertree Wines

Ken Helm-Helm Wines

Liz Riley- Vitibit Consulting

Manfred Stoll- Geisenheim University

Yalumba Nursery





Robert Stein Vineyard, Farm & Winery.

Mudgee, New South Wales
Australia

By Jacob Stein, May 2022.

Our Riesling Voyage



ROBERT STEIN

MUDGEE SINCE 1976



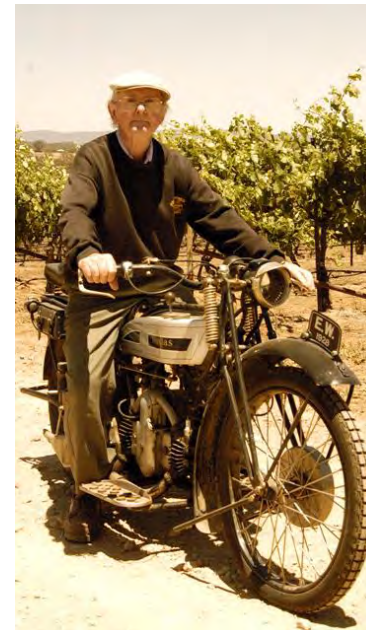
ROBERT STEIN
MUDGEESIDE SINCE 1976

STEIN FAMILY HISTORY

- The Stein History in Australia dates back to 1838 with Johann Stein arriving from the Rheingau (Erbach) Germany on the ship *Kinnear* bringing with them Riesling vines
- This was some of the earliest Riesling to be imported and successfully grown in Australia.
- Johann was one of the very earliest “Vine Dressers” and was a leading role in the Macarthur Vineyard and Nursery establishment in the 1830’s, and had Riesling Cuttings advertised for sale in 1843.
- Johanns brother, Jacob Stein and his wife Anna Maria arrived in 1843, and also joined the Macarthur operation until the brothers saved up enough money to buy their own farms in Carramar & Fairfield in the 1850’s and planted Vineyards including Riesling.
- The Stein family also resided in Horsley Park and were Vignerons in the 1910’s and 20’s.
- 1975 saw Robert Stein purchase 25 acres of land in Mudgee after a search for suitable and affordable land.



Jacob Stein and Anna Maria in 1843



HORSLEY WINE HOUSE

28 March 1912



ROBERT JOHN STEIN - ROY G. STEIN - with
CAMPBELL PERRY.
28 MARCH 1912

Robert John Stein - Gardener & Vignerons

Roy G Stein & Campbell Perry

Great Grandfather of Andrew Stein & Great Great Grandfather of Jacob Stein



ROBERT STEIN
MUDGEE SINCE 1976

ROBERT STEIN VINEYARD, FARM & WINERY

- Located in the Mudgee region of New South Wales.
- Established in 1976 by Robert 'Bob' Stein and family.
- Our farm encompasses 600 acres and is a mixed enterprise with 15 Ha of vineyard, Angus Beef Cattle, Dorper Sheep, Free-ranging Rare breed pigs and some cropping paddocks.
- We have a very busy cellar door open 7 days a week, a Vintage motorcycle collection and also a restaurant named Pipeclay Pumphouse.
- Our winery crush is 400 Tonnes per year including some contract winemaking.
- 30% of our production is Riesling

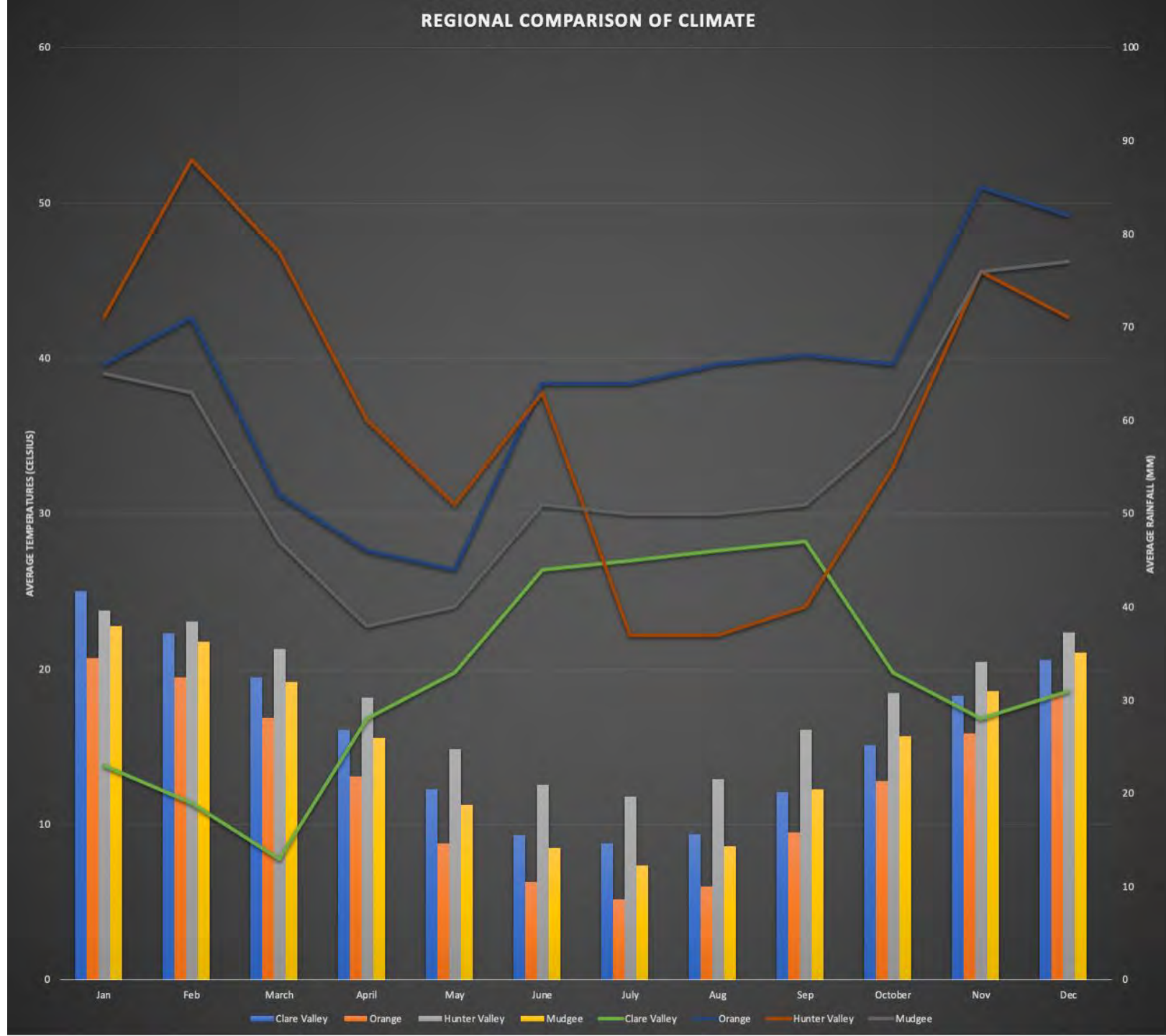




ROBERT STEIN
MUDGEES SINCE 1976

MUDGEES CLIMATE

- Elevation of town is 462m but most vineyards are at 600m and reach as high as 1182m (Nullo Mountain).
- Harvest during March and April are some of the drier Months.
- MJT: 22.9 °C Warmest month
- Average annual temperature 15.2 °C
- Mudgees Average Rainfall is 650 mm- drier than Orange and Hunter, but Clare is drier.
- Mudgees wettest months are November & December
- Warm summers and quite cold winters.
- Graph shows: Columns compare the Ave. temp and lines compare ave rainfall.





OUR SITES

- RSV is 15Ha and 9kms North of Mudgee.
- 8 varieties: Shiraz, Riesling, Merlot, Cab Sauv, Gewurztraminer, Chardonnay, Montepulciano & Black Muscat.
- Soil is Red Ironstone on top of medium sandy loam, clay is deep at 500mm.
- Riesling block 3Ha and is red ironstone with shale and quartz in top soil – very tough rocky site.
- Lease blocks:
 - Farmers Quarters Vineyard is across the road, 10ha and is being top-reworked over the next 2 years. Chardonnay, Shiraz, Cab & Merlot.
 - Wallenstein Vineyard is 3km west of us, Organically certified, is all Shiraz and 5Ha.
- Plus we do purchase fruit from other vineyards in Mudgee, Orange, Hilltops & if needed from Clare Valley SA.





OUR VINEYARD MANAGEMENT

- Majority of vine age 43-46 years, our youngest block (Monte) is 5 years old.
- Our view for a long term approach started in 2010: a soft hand, look after our land & focus on soil improvement.
- The methods we have seen to have the most benefit to overall soil and vineyard health are: applying mulch & compost undervine, Planting and maintaining Cover Crops, in turn-reducing herbicide reliance. Fertigation of beneficial nutrients and Microbes.
- Cover crop: diverse pasture blend of grasses, brassica, clovers, cereals and legumes. Self replenishing.
- We produce our own compost from Grape Marc, Cow Manure, straw & apply every 2 years.
- One parameter we closely monitor and gauge success is Organic matter & we have raised from 1.2% in 2010 to now 6% in 2022.
- Vigorous Canopy – so needs trimming.
- Sunscreen when required.
- Soils were previously pH 7, slowly reducing down to pH ~6 with lime.





ROBERT STEIN RIESLING VINEYARD

- 3Ha in size, VSP, two foliage wires per side.
- 3M wide rows, North west running rows, south west facing 1800 Vines/Ha
- Drip irrigation used when needed & fertigation of nutrients.
- Spur Pruned: 2 bud spurs, 13 spurs per vine.
- Compost applied bi-annually.
- Soil test bi-annual – normally needs Boron, Calcium, Magnesium.
- Cover crop side mulched to suppress weeds, creating mulch.
- Spray regime with some micro-nutrients (+ B, Ca), plenty of beneficials like seasol & croplife applied. Can get Botrytis in wet years. Bunch closure botrytis and LBAM spray applied.
- Average cropping rate is 5T/Ha after some either shoot thinning or fruit thinning.
- Always hand-picked to allow whole bunch pressing.
- Clones: Rhine Riesling, GM110, GM198, AV70, 2352, replants in D2V2, Pewsey Vale all on own roots.





ROBERT STEIN
MUDGEE SINCE 1976

THE NEED FOR EXPANSION

- Due to demand, we need to expand.
- In 2022 & 2023 we are planting 5Ha's including another 3 Ha of Riesling, 0.8 Ha of Sangiovese & 0.8 Ha of Barbera + another variety tbc.
- Riesling block (incl. other) will be still 3M wide rows but closer planted at 1.2m so nearly 2800 vines/Ha.
- Quality focused block, still VSP to start but may convert to cane pruning and 2 foliage wires on each side. Eco Posts for varying wire placements.
- Clones: D2V2 & Pewsey Vale on 1103 Paulsen Rootstock.
- Soil is similar to current block, however opposite side of slope, so more western facing. Potential to be slightly hotter site. Tougher soil, even rockier than current site.
- Row orientation East West.
- Potential to be an excellent Riesling site.





ROBERT STEIN
MUDGEE SINCE 1976

RIESLING HARVEST, VINTAGE AND WINEMAKING

- We believe Riesling wine is made in the vineyard, look after your fruit and winemaking becomes simple.
- Riesling needs to be hand-picked or machine harvested very well with whole berry to have with purity & high quality.
- Whole bunch/berry pressing preferred, be gentle, German Willmes air bag press, less solids.
- Juice needs to be respected, but can take some Oxygen to soften any phenolics.
- Normally no acid adjustments needed, cold settled, Neutral yeast, cold fermentation at 14 ° C, and 2-3 months on lees depending on wine.
- Pressings are kept separate, treated differently with a little more Oxygen allowed and fined harder normally produces excellent pressings for (lower quality) Riesling blending.
- Riesling is unforgiving, any mistakes are shown in the wine, like stuck ferments so we ensure YAN are high enough before ferment starts.
- Time on lees for power & longevity, or rack off early for more fruit expression.
- Cross Flow, sterile filter, bottle on site.





RS Riesling – RELEASED IN AUGUST EVERY YEAR

Reserve Riesling \$60

This wine is always 100% from our own top block, planted in 1976. Hand-picked & WBP, a portion goes into older oak for ferment. 4-6 months lees contact. Finesse and power. Baume 11-12, pH 2.8-3.1, TA 6-10

Dry Riesling \$40

This wine is made from the rest of our RSV, plus other Mudgee fruit when available. Still also hand-picked and WBP, all SS ferment, lees for 4-5 months. Classical RSW House style, similar every year.

Baume 11.5-12, pH 3-3.2, TA 5-8

Half Dry Riesling \$50

Now sourced from Angullong Vineyard in Orange every year. Similar elevation, 2-3 weeks later than Mudgee. Half Dry style works well with higher acid fruit.

Baume 11-11.5, pH 2.8-3, TA 6-10

OTHER WINES:

Shiraz Riesling \$40

Farm Riesling \$28 – Wholesale/Distributor only



ROBERT STEIN
MUDGEE SINCE 1976



ROBERT STEIN WINERY ACCOLADES

- Winner of Sydney Royal Wine Show Riesling Trophy – 2021 & 2019.
- Riesling awards: 60 Trophies, 87 Gold medals since 2009.
- Canberra International Riesling Challenge: Top Ten Riesling awards twice, and Best Museum Riesling also Twice.
- Mudgee Winemaker of the Year 2021-2017
- 2012 GT Wine YWOTY and 2011 CIRC Up and coming Riesling winemaker award.
- Wine Companion Red Red Five Star Winery 2012-2022.





MY FAVOURITE RIESLING & OTHER WINE EXPERIENCES

- Harvest in Germany 2005 & 2006 – Working in the Rheingau and Rheinhessen (Weil, Wittmann) and helping to make 30-40 batches of high end Riesling.
- Visiting some of the Vineyards in Rheingau that our family owned and worked in the 17 & 1800's
- Doing a Vintage in Piemonte and loving the Italian varieties, food & culture.
- Riesling Eiswein in Germany and Icewine in Canada





THANK YOU

Terroir-driven Riesling

Canberra District



MOUNT MAJURA
VINEYARD

Single Vineyard

- Silurian period, 430MY
- Limestone and volcanic
- Pines planted 2000
- North grafted 2016
- Valley planted 2021



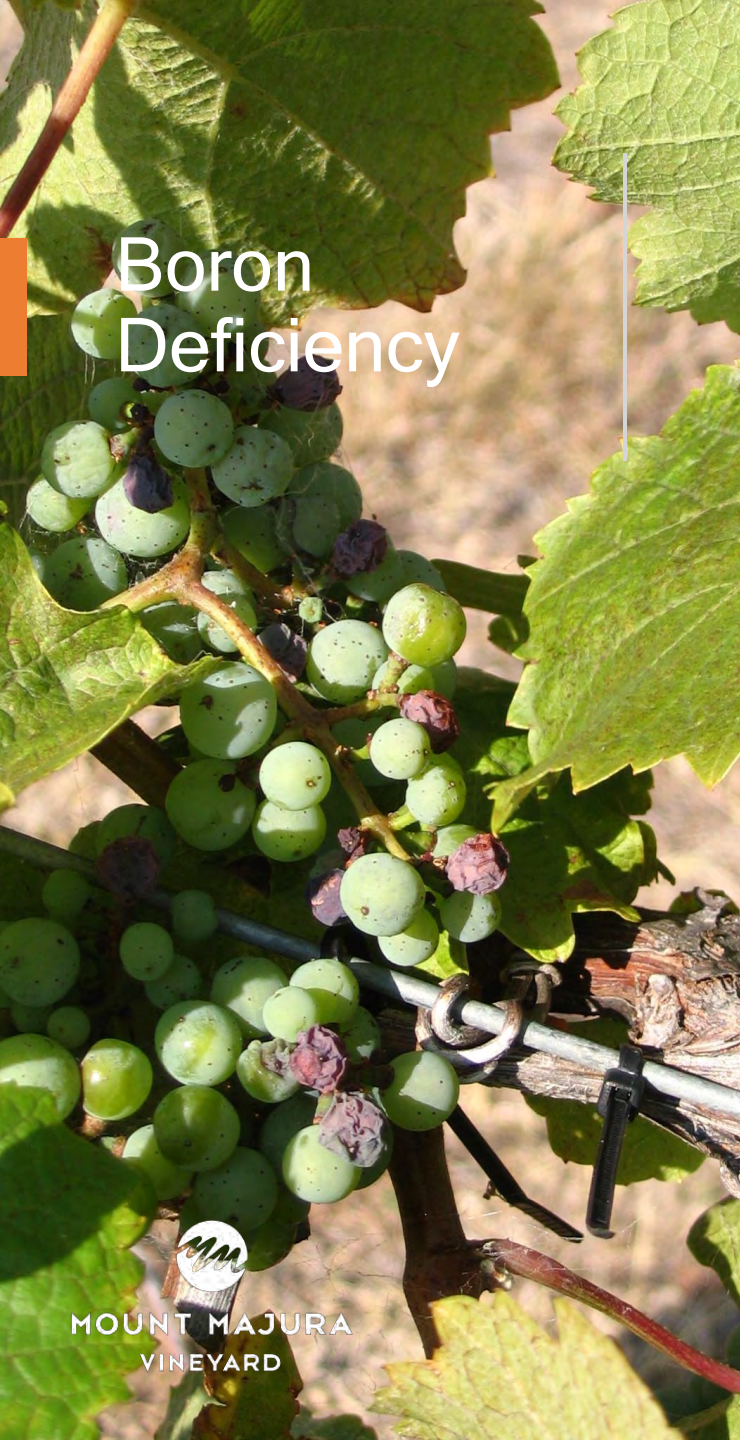
Viticulture

- D2V2/own roots, pinot
- Gm198, Pewsey Vale/Ruggeri
- Canopy: climate and season
- Lift south, sprawl north
- Spur pruning
- Bunch thinning
- Ripeness



MOUNT MAJURA
VINEYARD





Boron Deficiency



MOUNT MAJURA
VINEYARD

Winemaking Style

Purity
Balance



MOUNT MAJURA
VINEYARD

Winemaking

- Handpicked, chilled, crush, press (free/light only)
- Flotation: bright juice
- YAN <100: Complex nutrients
- DV10 (mSO₂<0.2)
- 16-13-18
- 5° to stop, then off lees quickly
- Juice reserve blended back on trials



MOUNT MAJURA
VINEYARD

Marketing





MOUNT MA



MOUNT MAJURA
VINEYARD



A close-up photograph of a bunch of green Riesling grapes hanging from a vine. The grapes are round and have a light green, slightly translucent appearance. They are surrounded by large, green, serrated leaves. The background is softly blurred, showing more of the vine and leaves.

RIESLING IN THE ORANGE REGION:

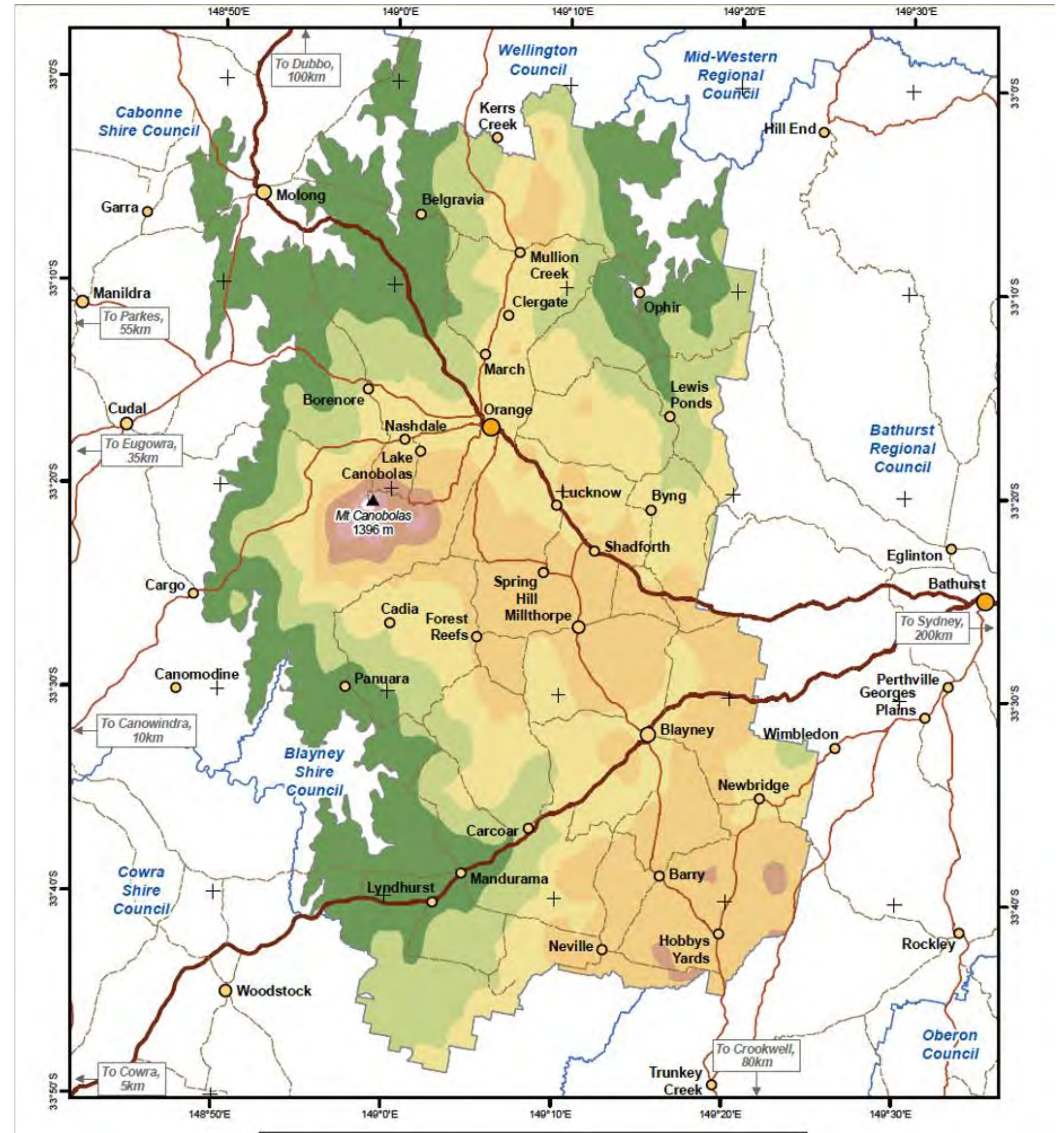
insights from Colmar Estate

**WHERE IS
ORANGE?**



THE ORANGE WINE REGION: DEFINED BY ALTITUDE

- Mount Canobolas sits at 1400m above sea level



An aerial photograph of a vineyard on a hillside. The vineyard is divided into several distinct rows of grapevines, with the rows curving along the contours of the hill. The vines are a vibrant green color. In the background, a dense forest of trees covers the top of the hill. The sky is blue with some white clouds. Overlaid on the image are two columns of text: 'ELEVATION' and 'GDD'. The 'ELEVATION' column lists values from 1000M to 600M, and the 'GDD' column lists corresponding values from 1180 to 1700. The text is white and bold, making it stand out against the green background.

ELEVATION

GDD

1000M

1180

900M

1310

800M

1440

700M

1570

600M

1700



ELEVATION

GDD

AUSTRALIA

1000M

1180

900M

1310

LAUNCESTON

HENTY

800M

1440

GREAT WESTERN

700M

1570

CANBERRA

600M

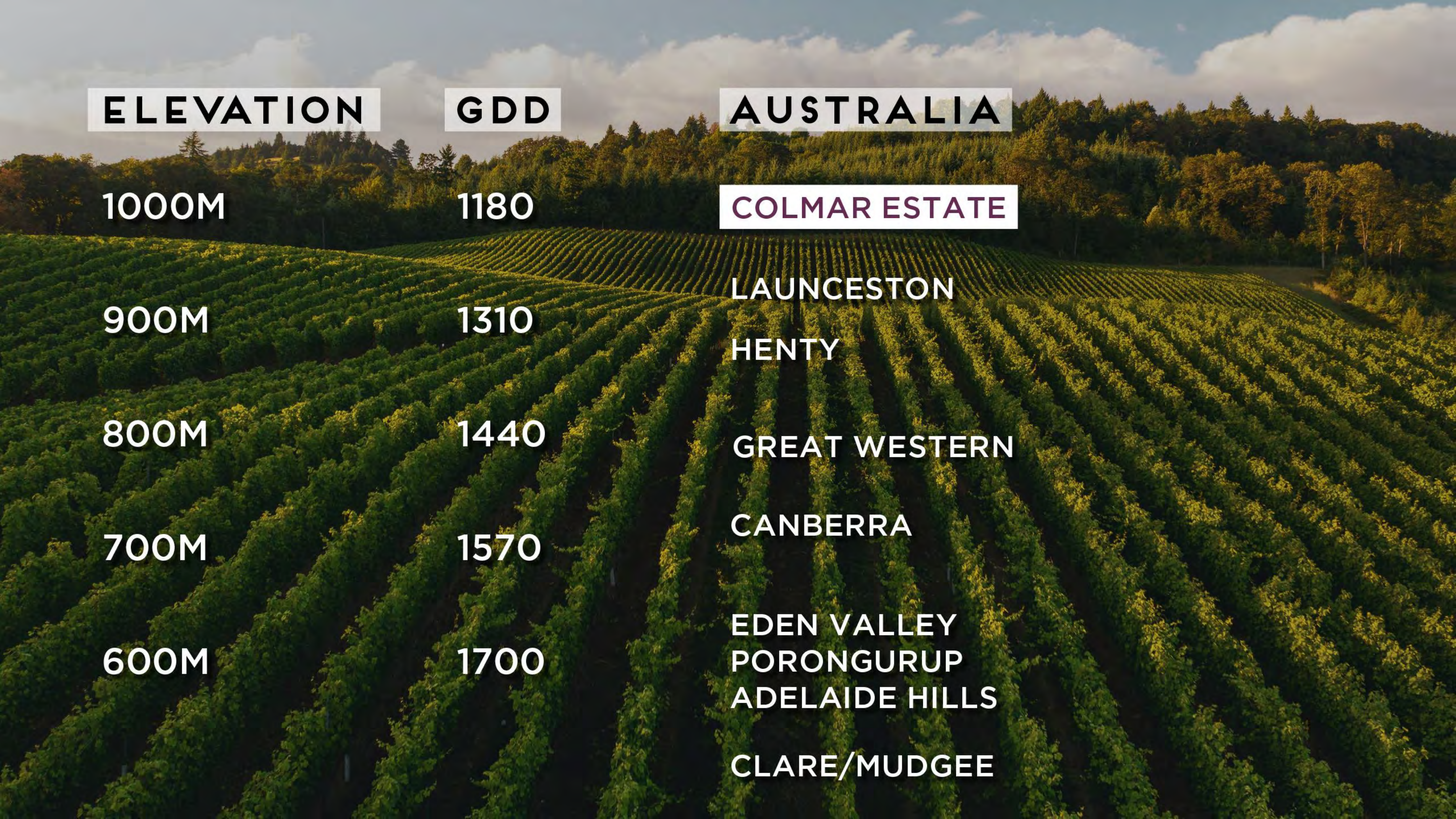
1700

EDEN VALLEY

PORONGURUP

ADELAIDE HILLS

CLARE/MUDGEE



ELEVATION

GDD

AUSTRALIA

1000M

1180

COLMAR ESTATE

900M

1310

**LAUNCESTON
HENTY**

800M

1440

GREAT WESTERN

700M

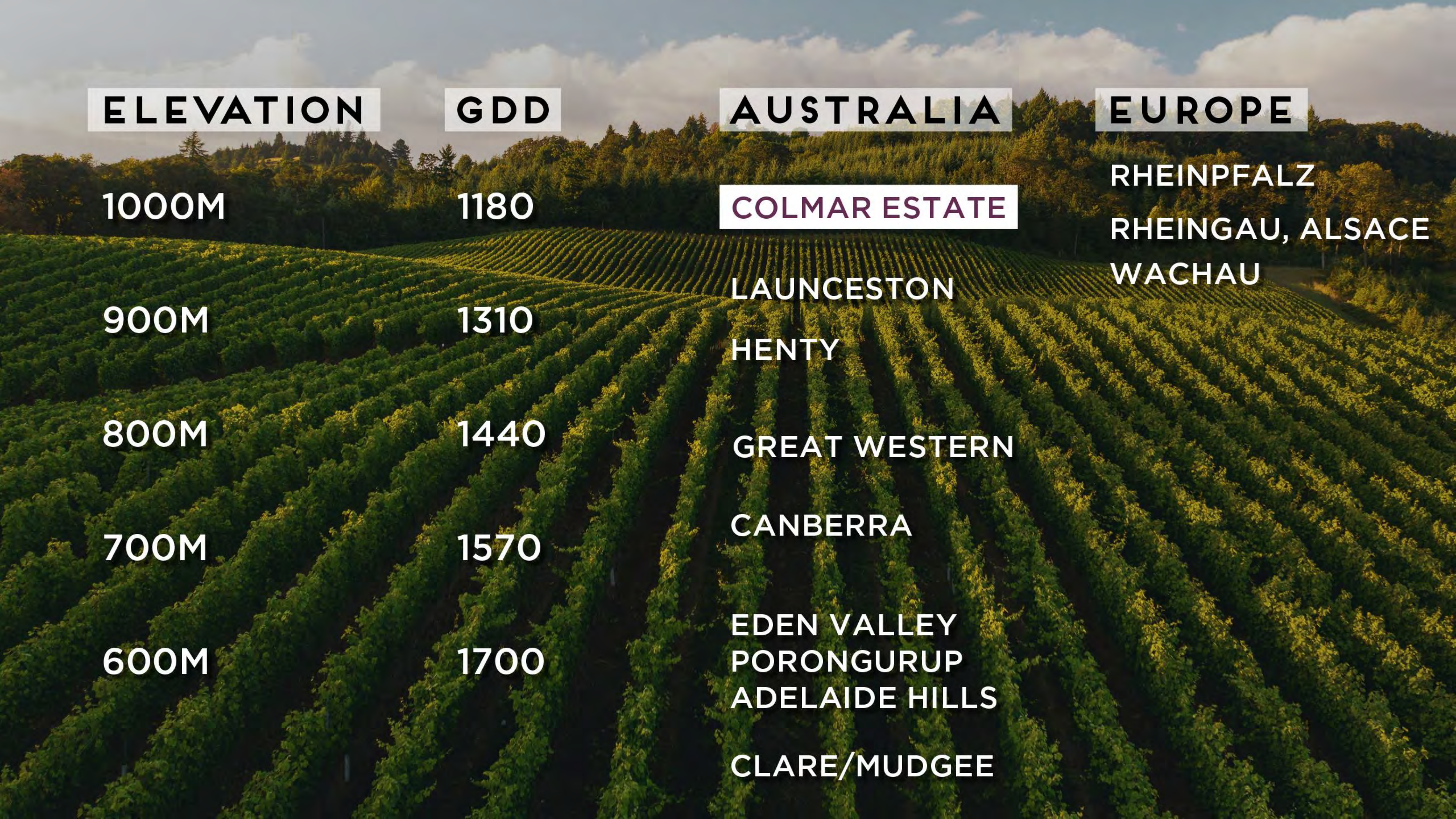
1570

CANBERRA

600M

1700

**EDEN VALLEY
PORONGURUP
ADELAIDE HILLS
CLARE/MUDGEE**



ELEVATION

1000M

900M

800M

700M

600M

GDD

1180

1310

1440

1570

1700

AUSTRALIA

COLMAR ESTATE

LAUNCESTON

HENTY

GREAT WESTERN

CANBERRA

EDEN VALLEY
PORONGURUP
ADELAIDE HILLS

CLARE/MUDGEE

EUROPE

RHEINPFALZ
RHEINGAU, ALSACE
WACHAU

ORANGE: A QUALITY REGION?





COLMAR ESTATE RIESLINGS

- Block 5
- Block 6



2022 RIESLING AT COLMAR ESTATE

		Baumé	
1st pick	19 April	11.5	
2nd pick	25 April	12.3	



2022 RIESLING AT COLMAR ESTATE

		Baumé	TA
1st pick	19 April	11.5	13.9
2nd pick	25 April	12.3	8.9



WHO IS OUR RIESLING CUSTOMER?

WHO IS OUR RIESLING CUSTOMER?



WHO IS OUR RIESLING CUSTOMER?

What he likes:

- Comes from Eden Valley
- Early-picked, lemon-lime fruit
- Fruit purity
- Bone dry with 'piercing acidity'
- Austere in youth
- Complex with age
- 20-year life span



WHO IS NOT OUR
RIESLING CUSTOMER?



WHO IS NOT OUR RIESLING CUSTOMER?

What she DOESN'T like:

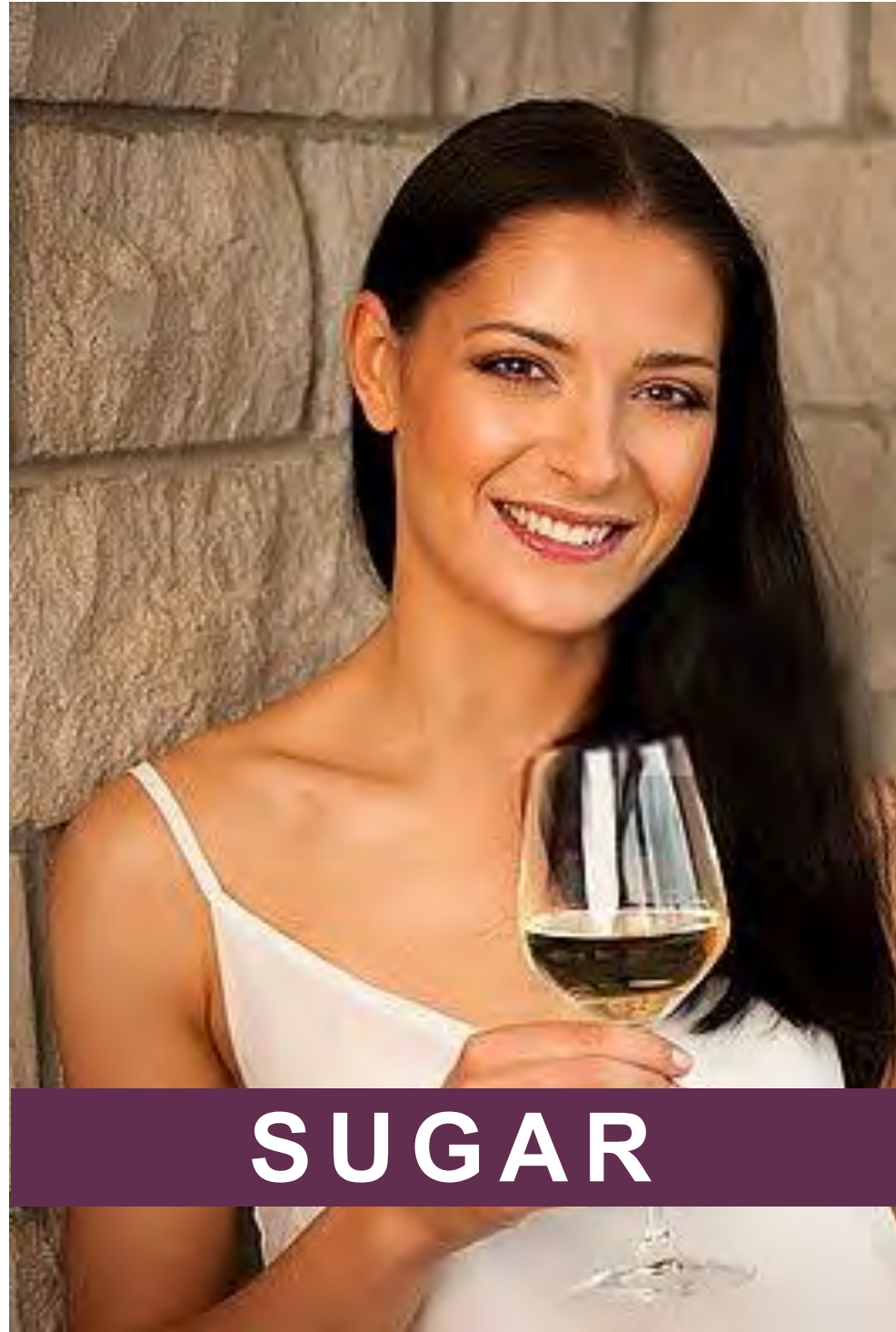
- Comes from Eden Valley
- Early-picked, lemon-lime fruit
- Fruit purity
- Bone dry with 'piercing acidity'
- Austere in youth
- Complex with age
- 20-year life span



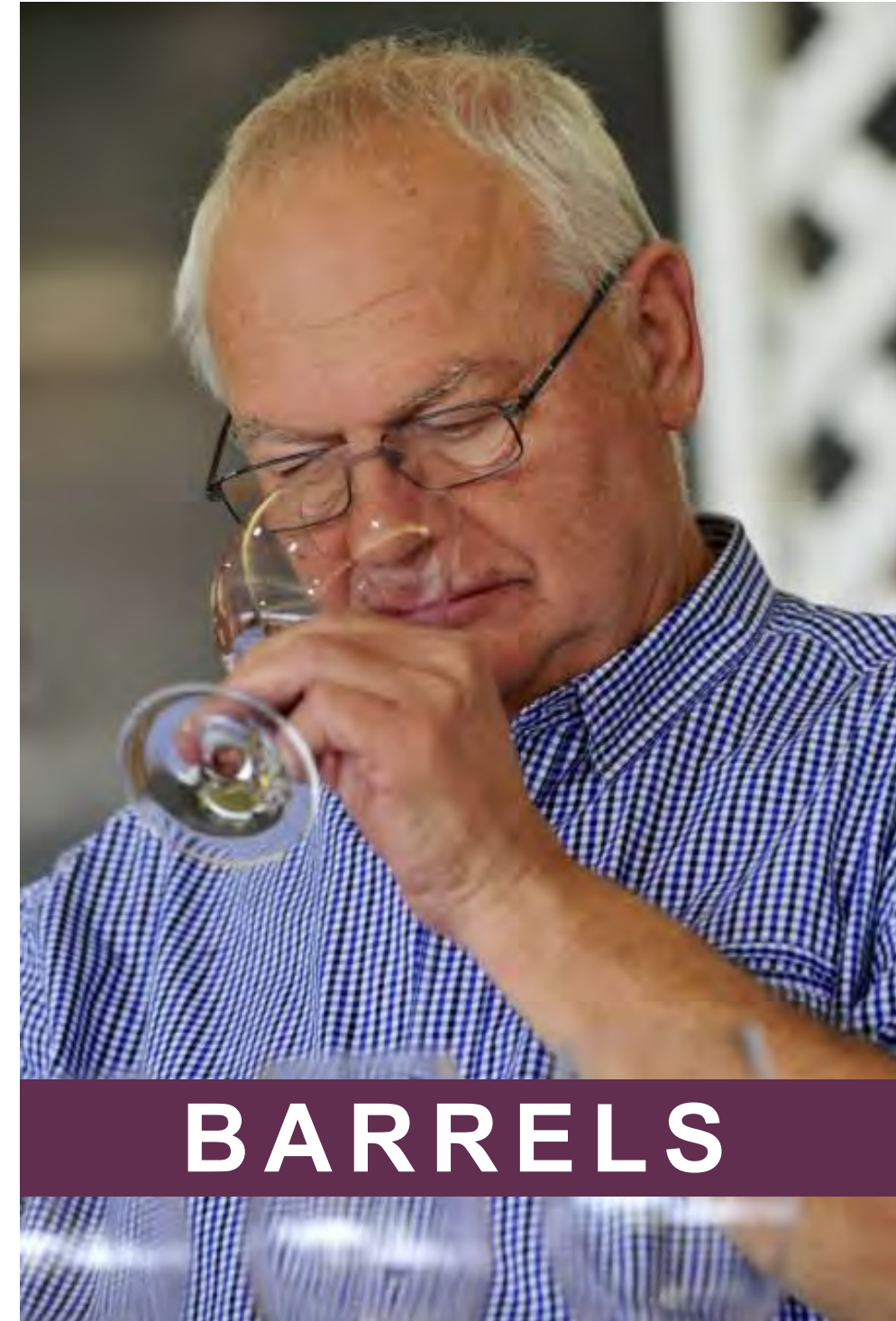
STYLE EVOLUTION



STYLE EVOLUTION



SUGAR



BARRELS

2021 BLOCK 5 RIESLING

- Half dry; RS 12.0 g/L
- TA 9.5 g/L



2021 BLOCK 5 RIESLING

“This stellar riesling is not excessively dry - let alone austere... but delivers delicious drinkability even at this tender age. It’s not totally dry but beautifully balanced, avoiding the austerity and acid bite of many young, cool-climate Aussie rieslings.”

Huon Hooke



SUMMARY

- The Orange Wine Region has a cool continental climate and produces good quality riesling
- Good quality Australian riesling has been narrowly defined
- Cooler sites and cooler years in Orange demand a broader interpretation of riesling style
- New styles have the potential to engage both:
 - Younger consumers
 - Traditional riesling lovers



12%
75



WINE
NÉGOCIANTS

AND
SHIPPERS

ROBARD & BUTLER
AMBERLEY
RHINE RIESLING

PRODUCED AND BOTTLED BY ROBARD & BUTLER LIMITED,
WINE NÉGOCIANTS AND SHIPPERS, AUCKLAND, NEW ZEALAND



WINE
NÉGOCIANTS

AND
SHIPPERS

ROBARD & BUTLER
AMBERLEY
RHINE RIESLING

PRODUCED AND BOTTLED BY ROBARD & BUTLER LIMITED,
WINE NÉGOCIANTS AND SHIPPERS, AUCKLAND, NEW ZEALAND

12%
75



WINE
NÉGOCIANTS

AND
SHIPPERS

ROBARD & BUTLER
AMBERLEY
RHINE RIESLING

PRODUCED AND BOTTLED BY ROBARD & BUTLER LIMITED,
WINE NÉGOCIANTS AND SHIPPERS, AUCKLAND, NEW ZEALAND



SINGLE VINEYARD 5182

TWR

TE WHARE RA



RIESLING 'D'
Mariborough

EST. 1979

amie Goode

RESERVE BIN
DW C15
WATERVALE
RHINE RIESLING
1973 VINTAGE

This magnificent Rhine Riesling has achieved a most impressive show record including 1 Trophy, 8 Gold and 4 Silver Medals awarded from as early as 1971 to as recently as the 1983 National Wine Show in Canberra. Recognition of its outstanding quality and consistency. DW C15 is distinguished by an intense varietal and regional bouquet and a soft, delicate flavour, showing exceptional depth, lingering to a clean, crisp finish. An elegant wine from a great vintage, it was made from Rhine Riesling grapes grown at Leo Buring's "Florita" vineyard, Watervale, South Australia.

PRODUCE OF



AUSTRALIA

LEO BURING PTY LTD PARA RD TANUNDA SA

710 ml

**WIRRA WIRRA
VINEYARDS**

1997

HAND PICKED

Riesling











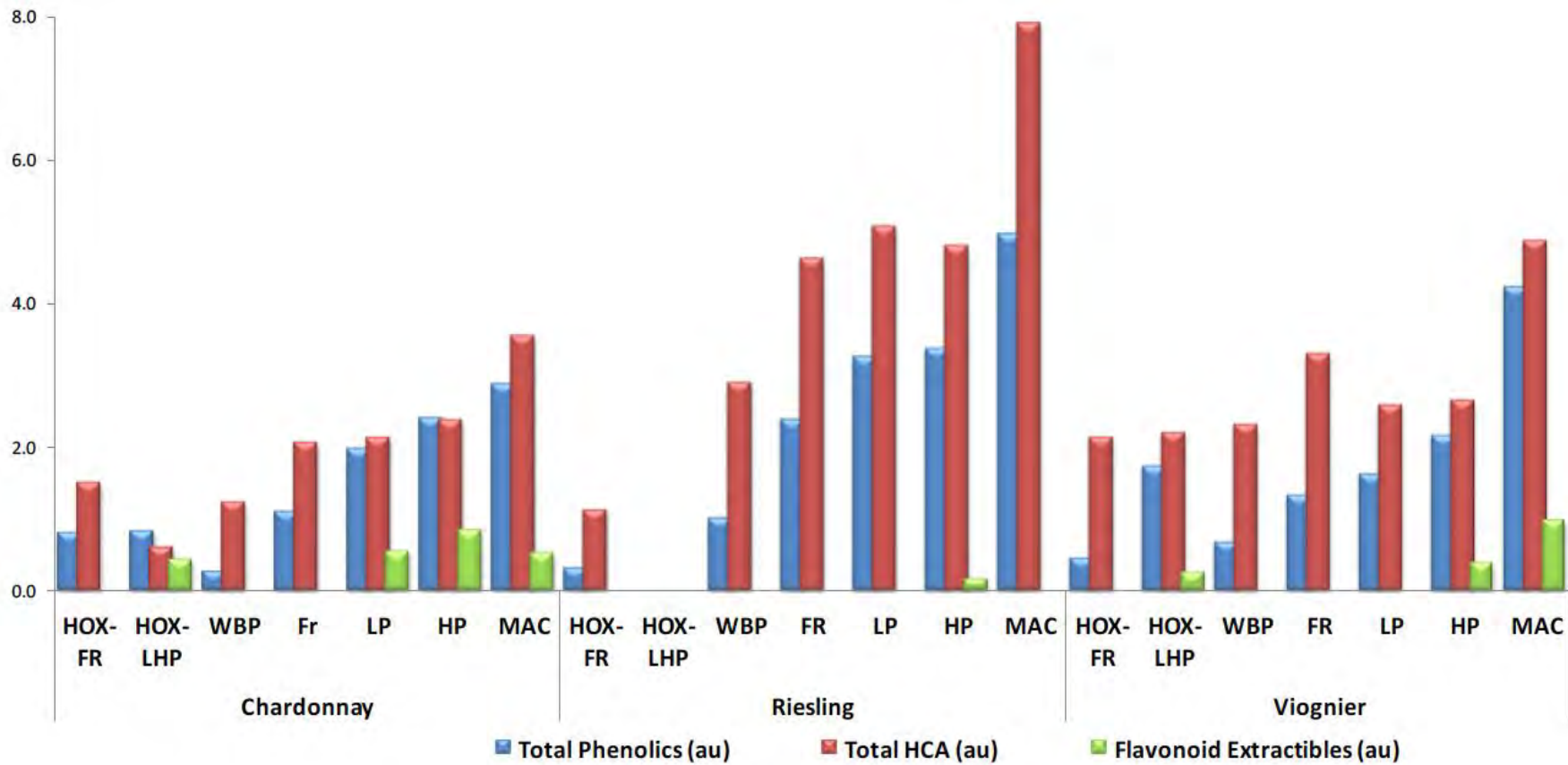
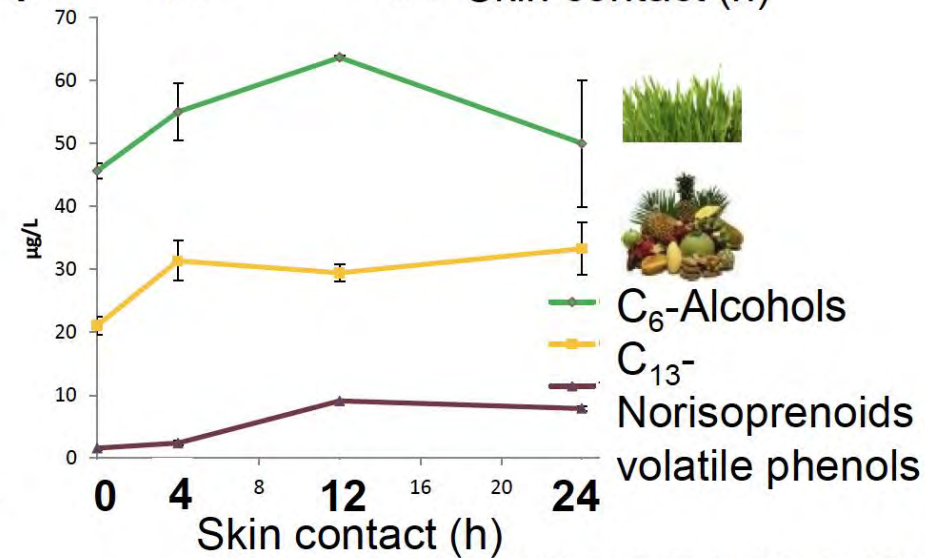
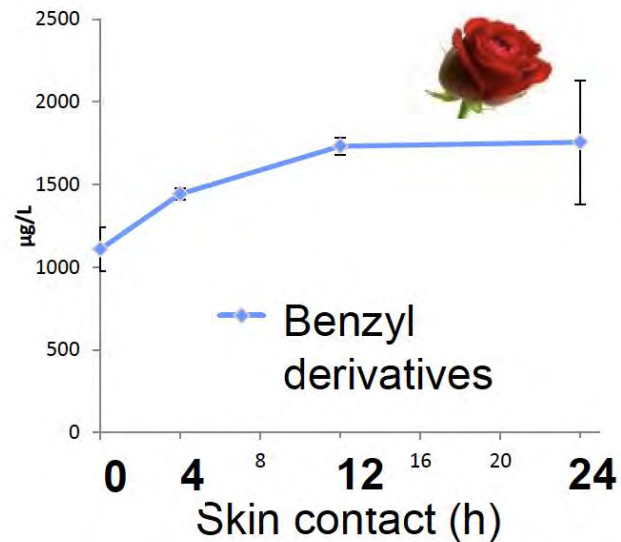
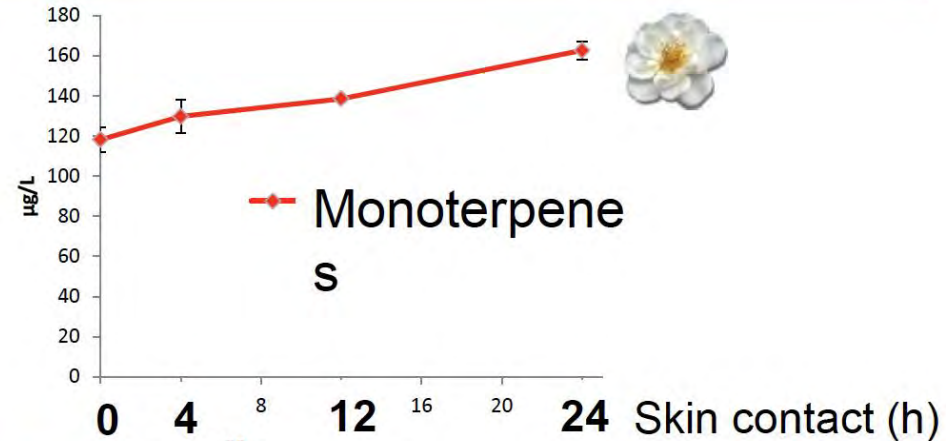


Figure 8-5: Somers' measurements for 2010 wines

Impact of skin contact time on aroma precursor extraction (2013 Riesling grapes, n=3)









Riesling Royale

Canberra, 18 May 2022

Riesling, Climate Change and Water Budget in the Rheingau

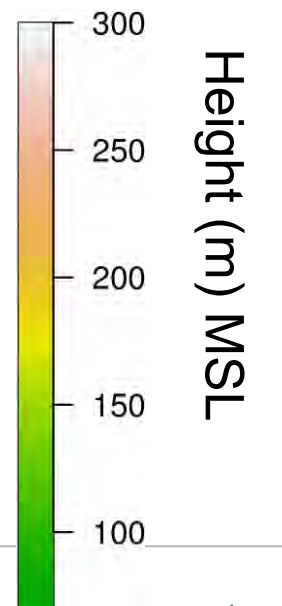
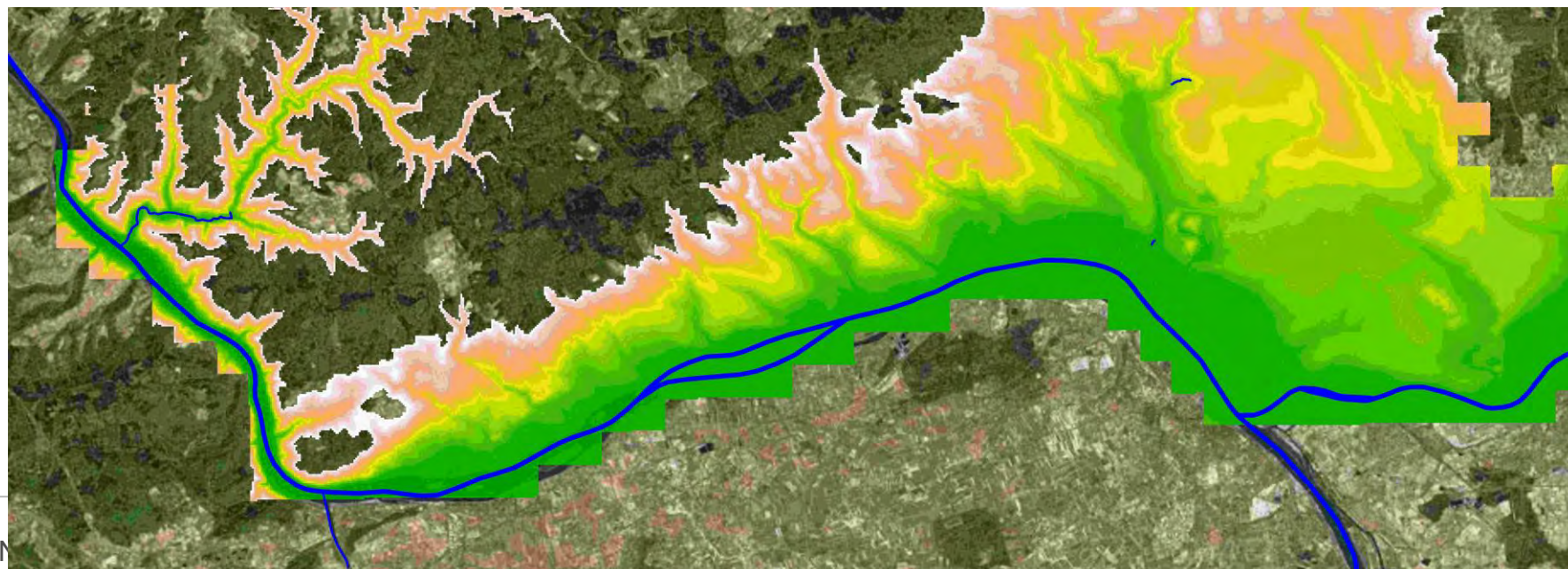
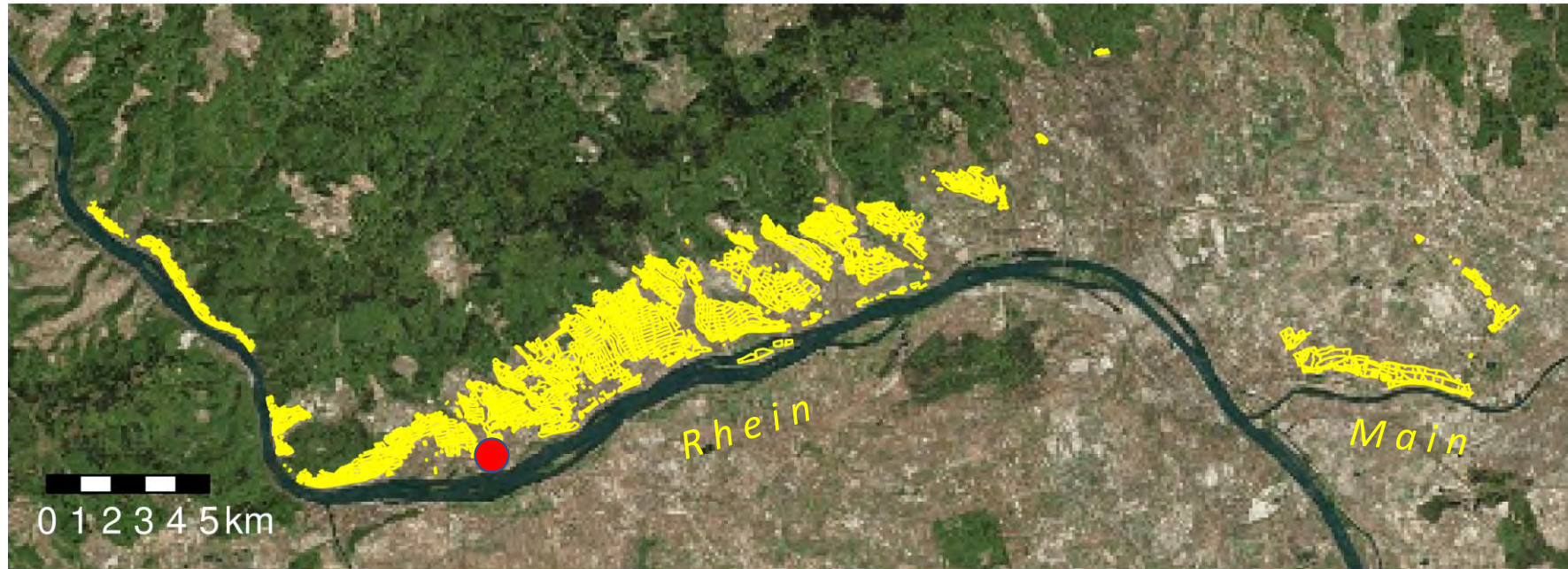
Marco Hofmann
Hochschule Geisenheim University

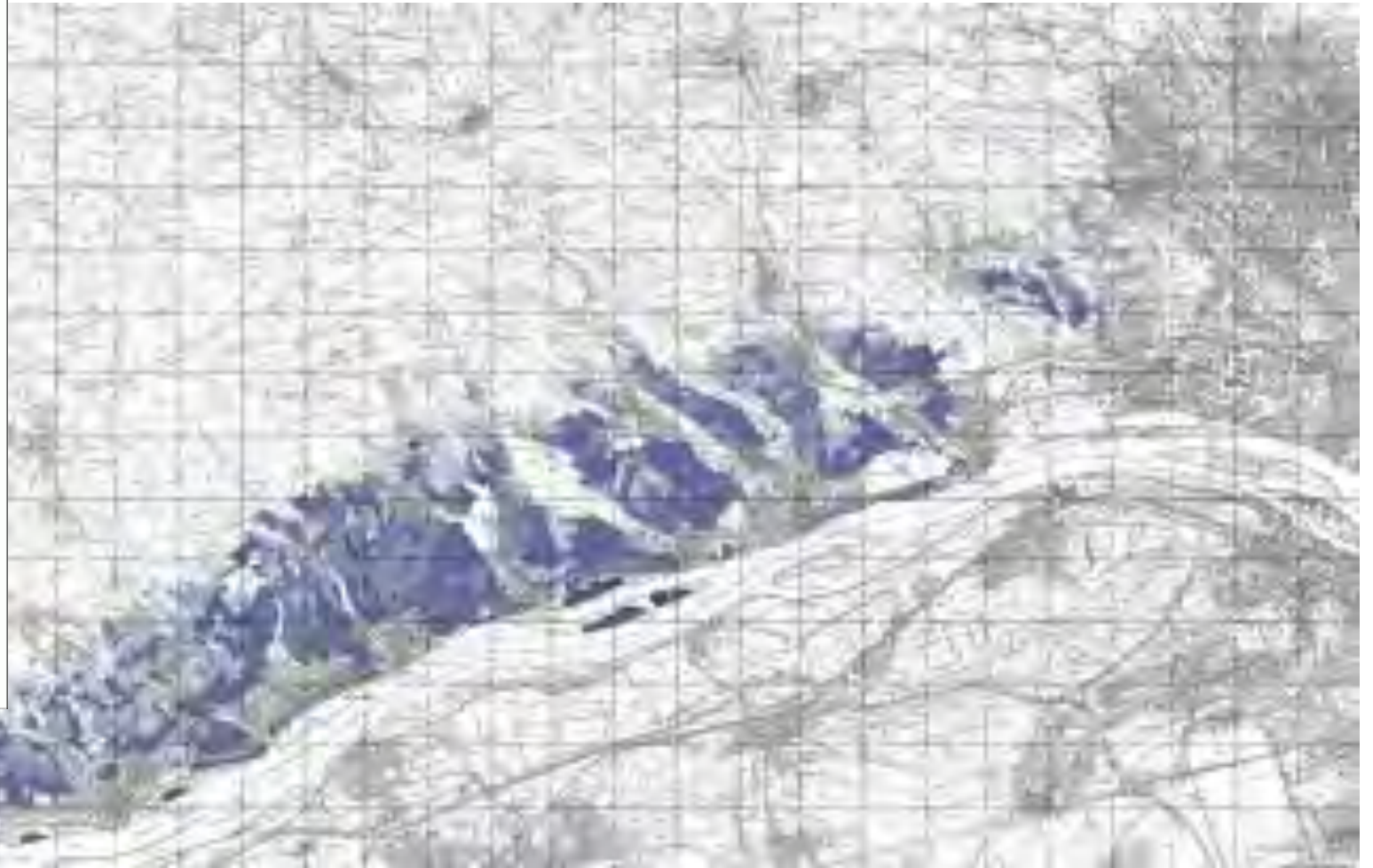
Institut für allgemeinen und ökologischen Weinbau

E-Mail: marco.hofmann@hs-gm.de



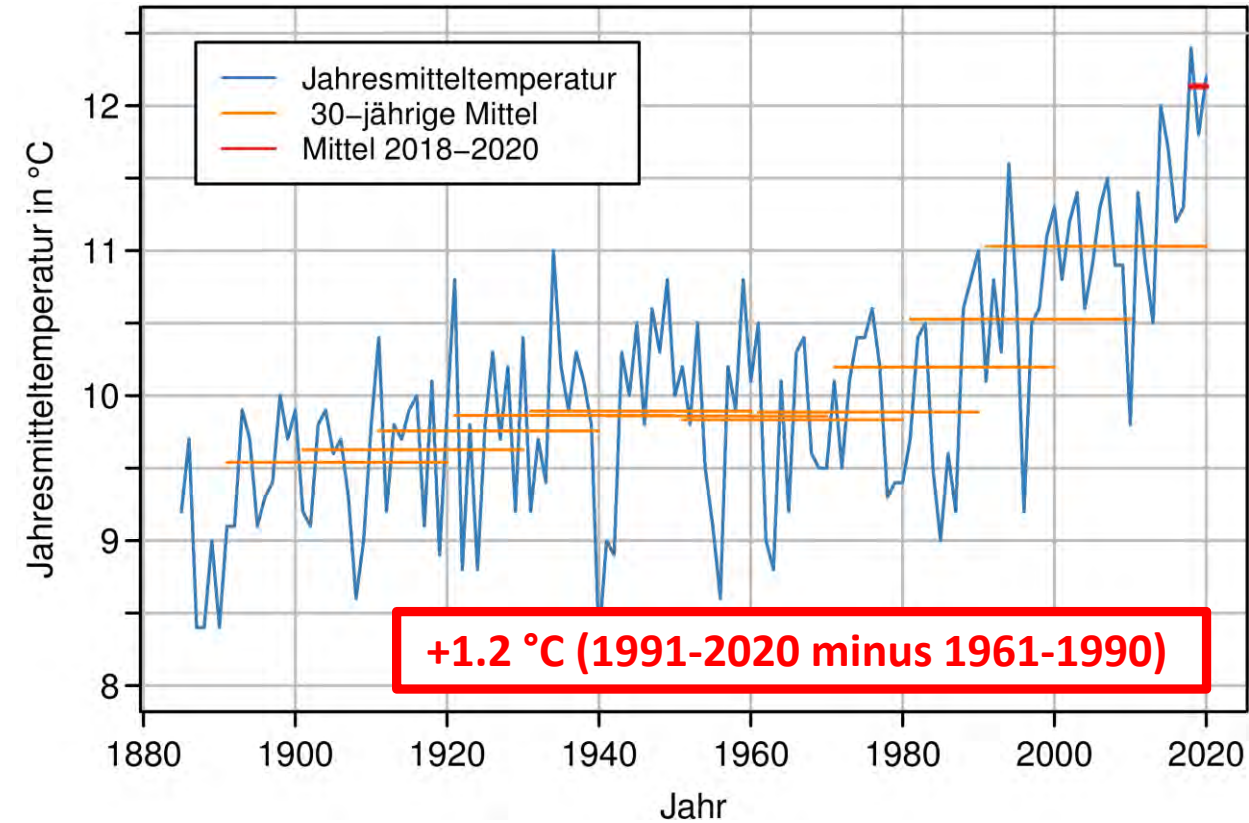
The Rheingau





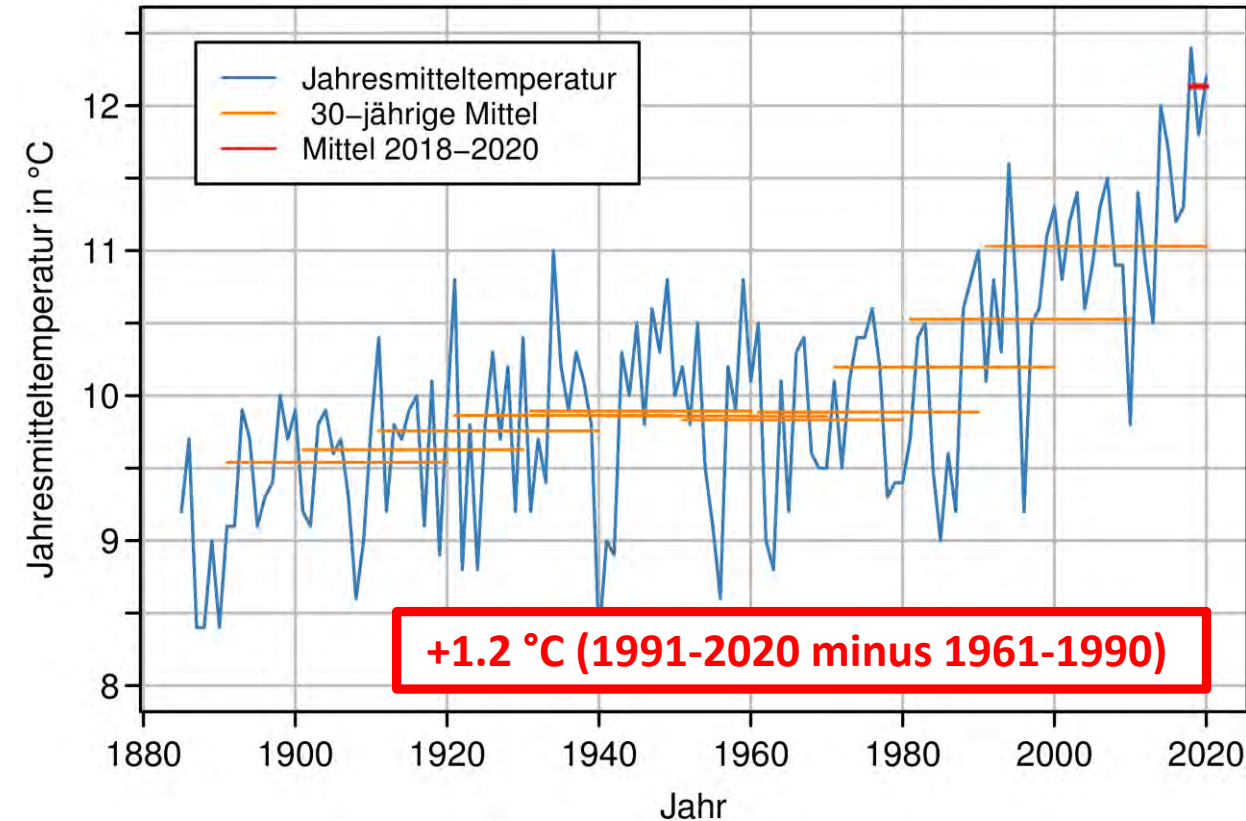
Rheingau: Climate and climate change

Annual mean temperature in Geisenheim

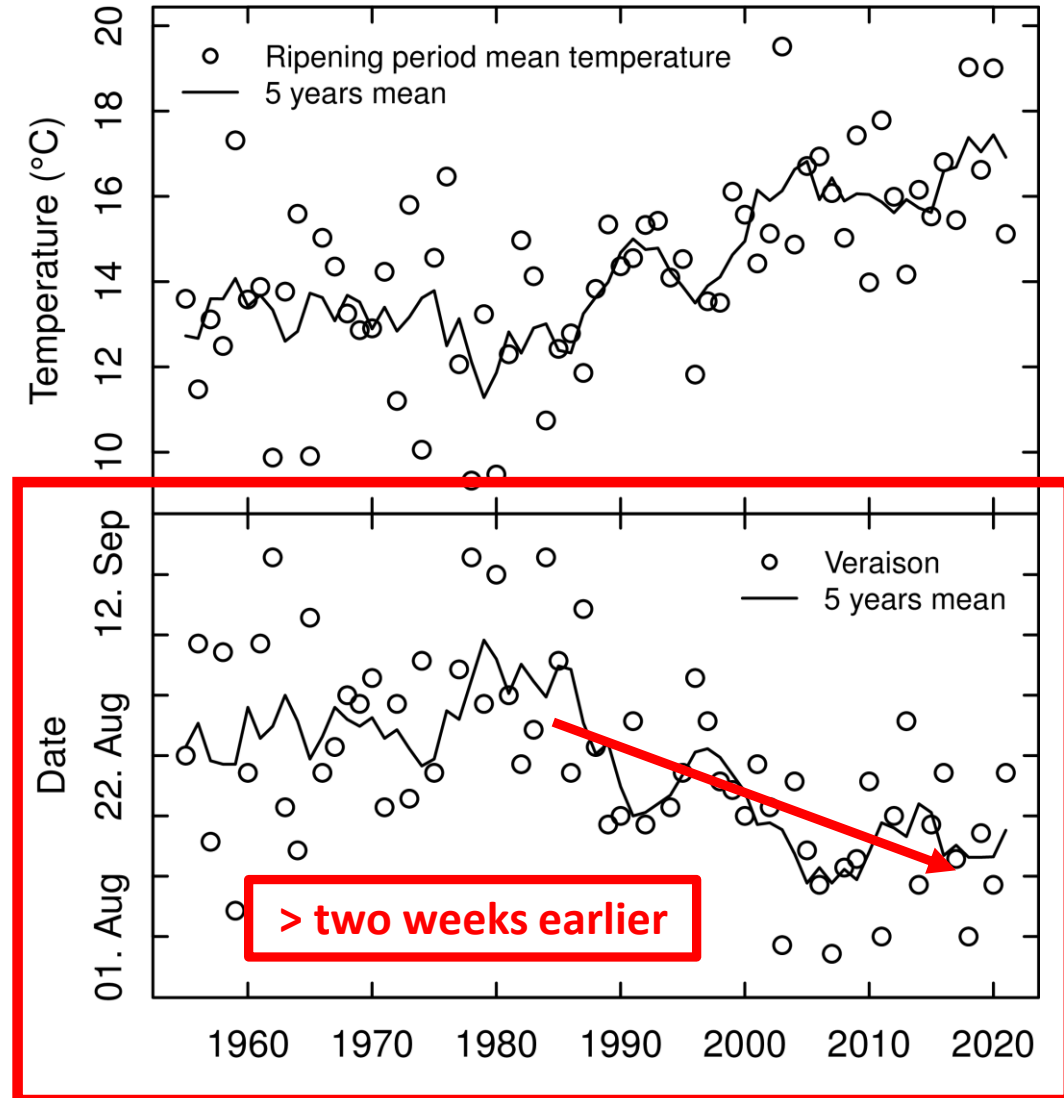


Rheingau: Climate and climate change

Annual mean temperature in Geisenheim

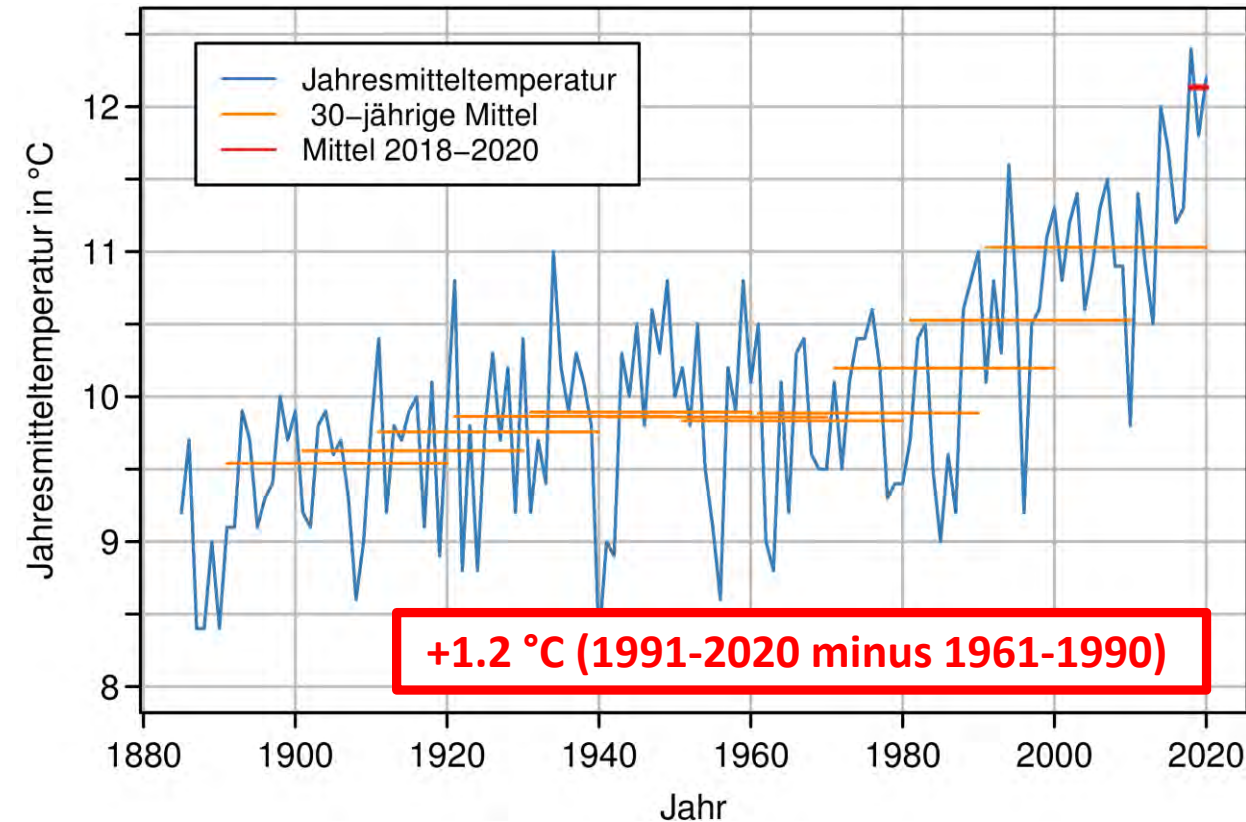


Mean of temperature during ripening period (60 days after veraison)

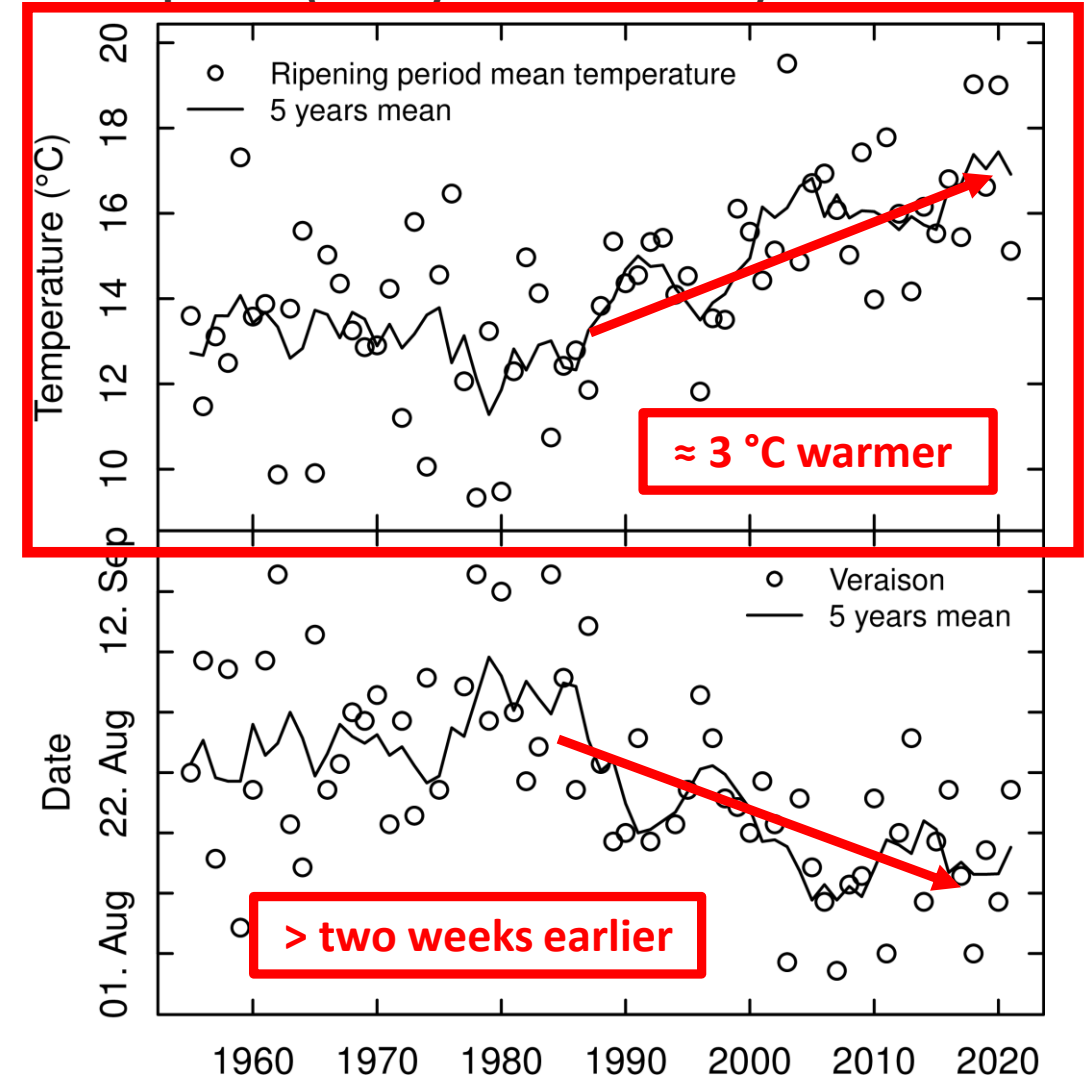


Rheingau: Climate and climate change

Annual mean temperature in Geisenheim

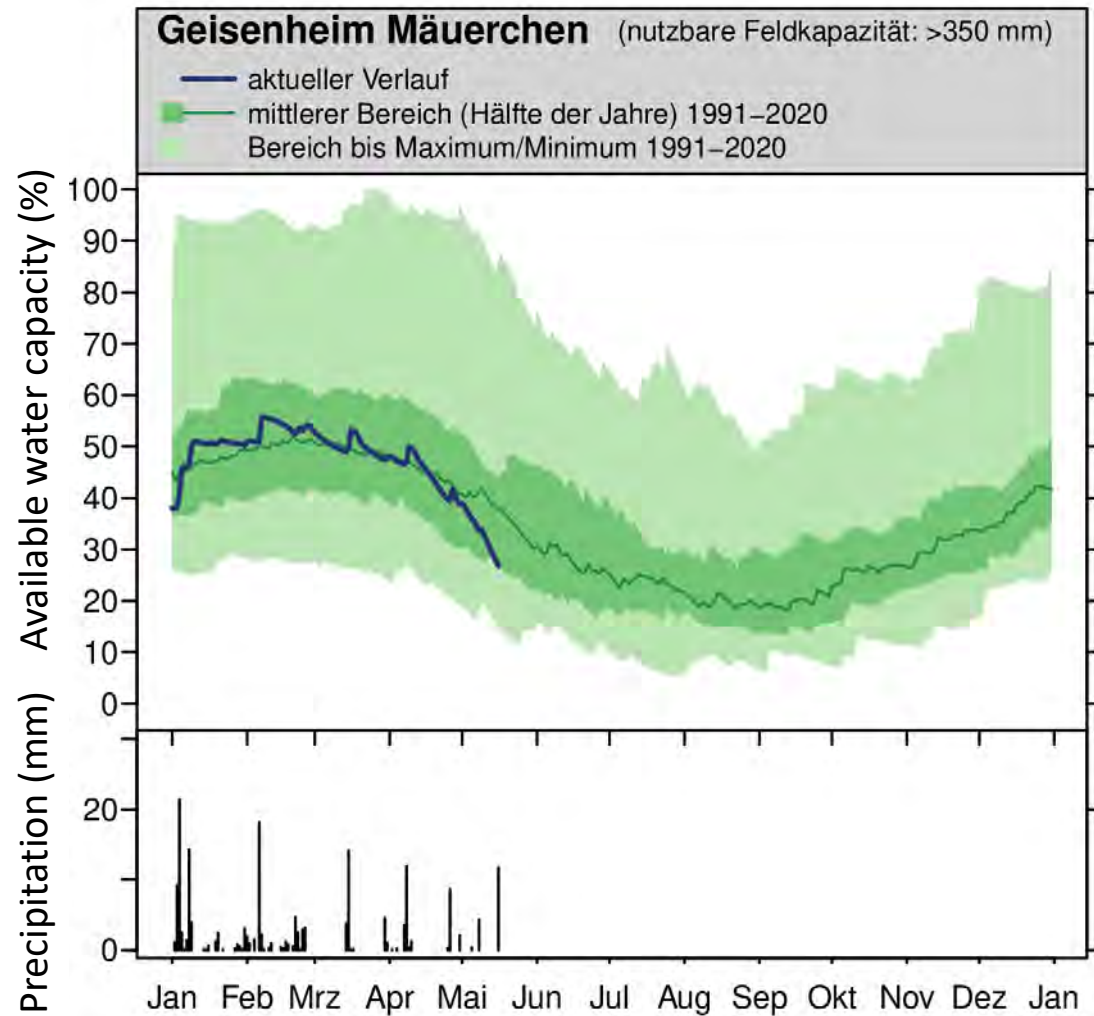


Mean of temperature during ripening period (60 days after veraison)



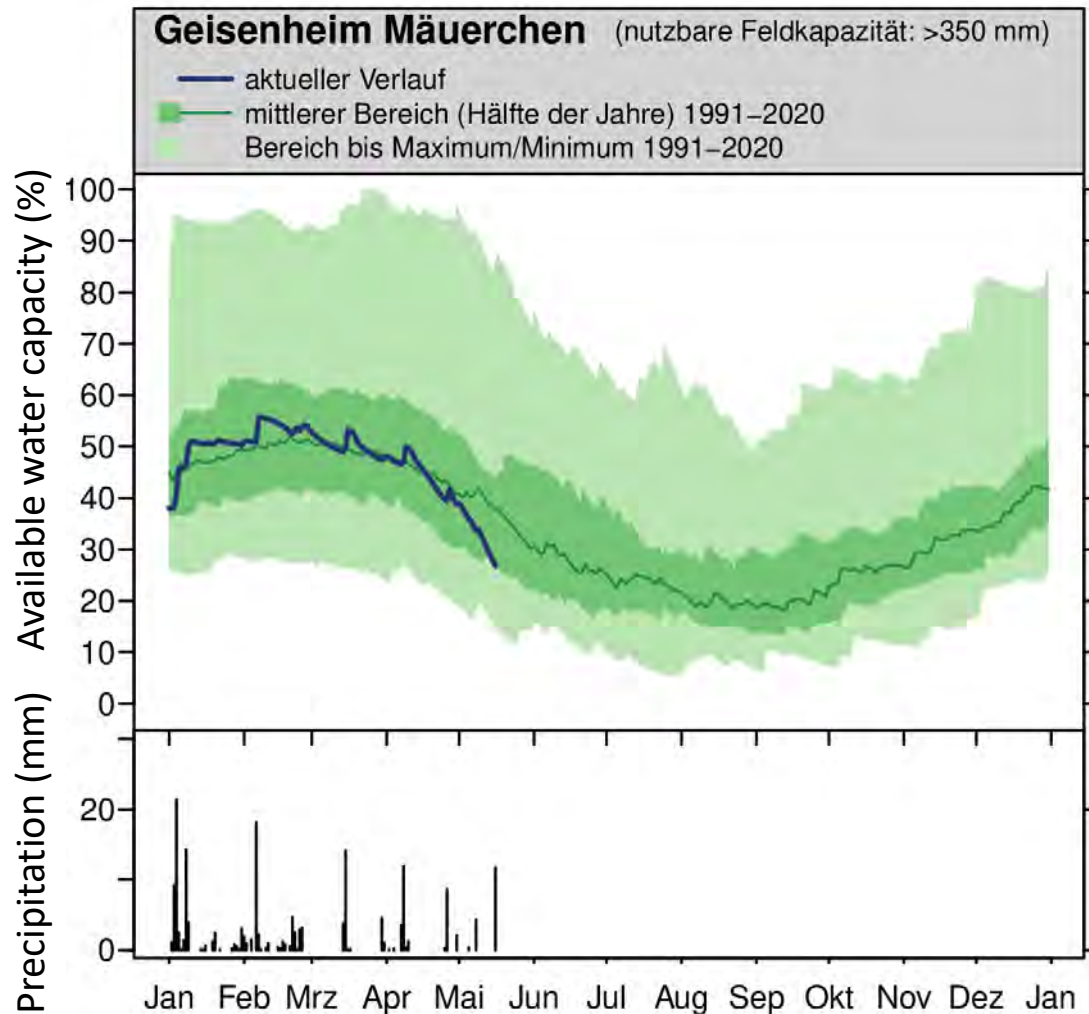
Rheingau: Water budget (calculated with a water balance model)

High available water capacity: > 350 mm

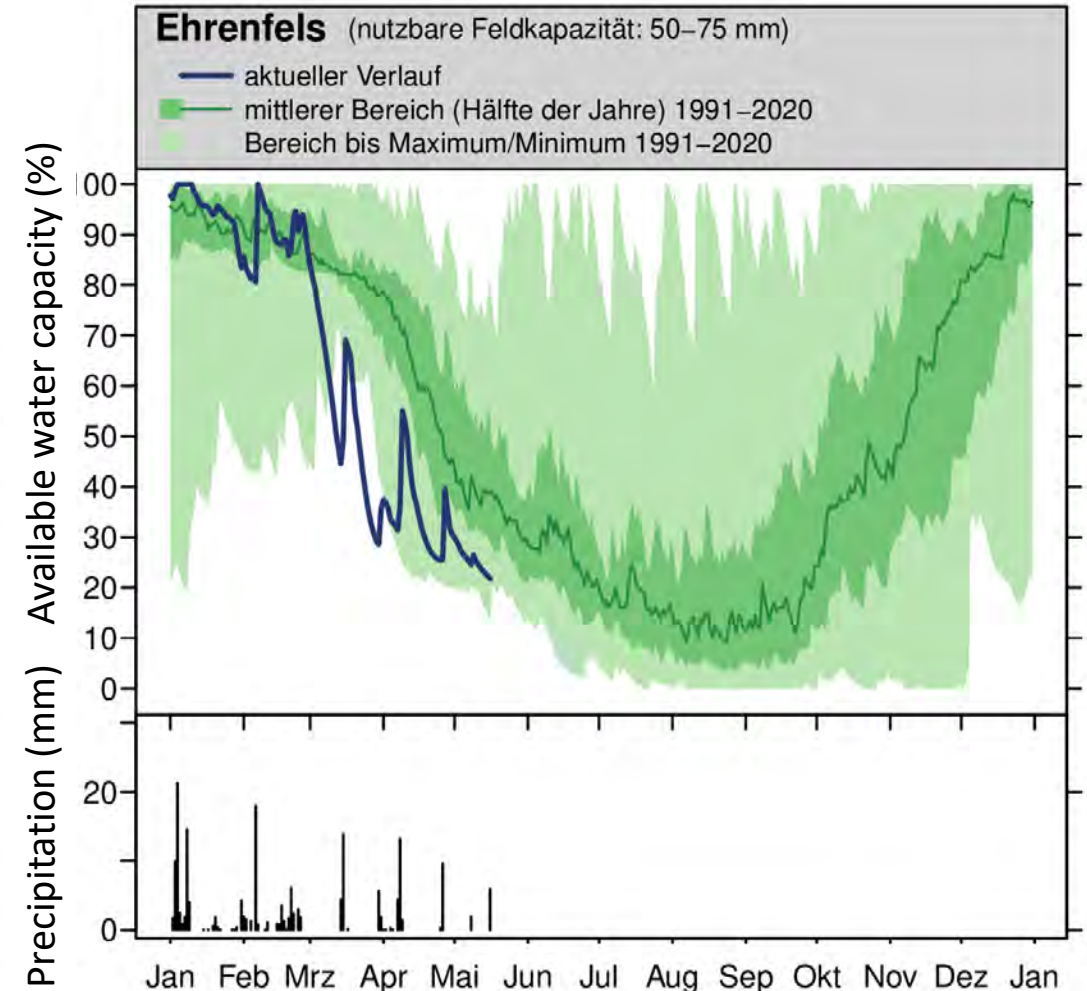


Rheingau: Water budget (calculated with a water balance model)

High available water capacity: > 350 mm



**Very low available water capacity: > 350 mm
and a steep slope ($\approx 30^\circ$)**



Many thanks you for the attention!





Charles Sturt
University

Gulbali Institute

Agriculture Water Environment

Adapting rain dependent and supplementary irrigated viticulture to a drying climate

Jason Smith¹, Reggie Baaijens¹, Gerhard Rossouw¹, Marco Hofmann², and Bruno Holzapfel³

¹ Charles Sturt University, Orange and Wagga Wagga, NSW, Australia

² Hochschule Geisenheim University, 65366 Geisenheim, Germany

³ NSW Department of Primary industries, Wagga Wagga, NSW, Australia

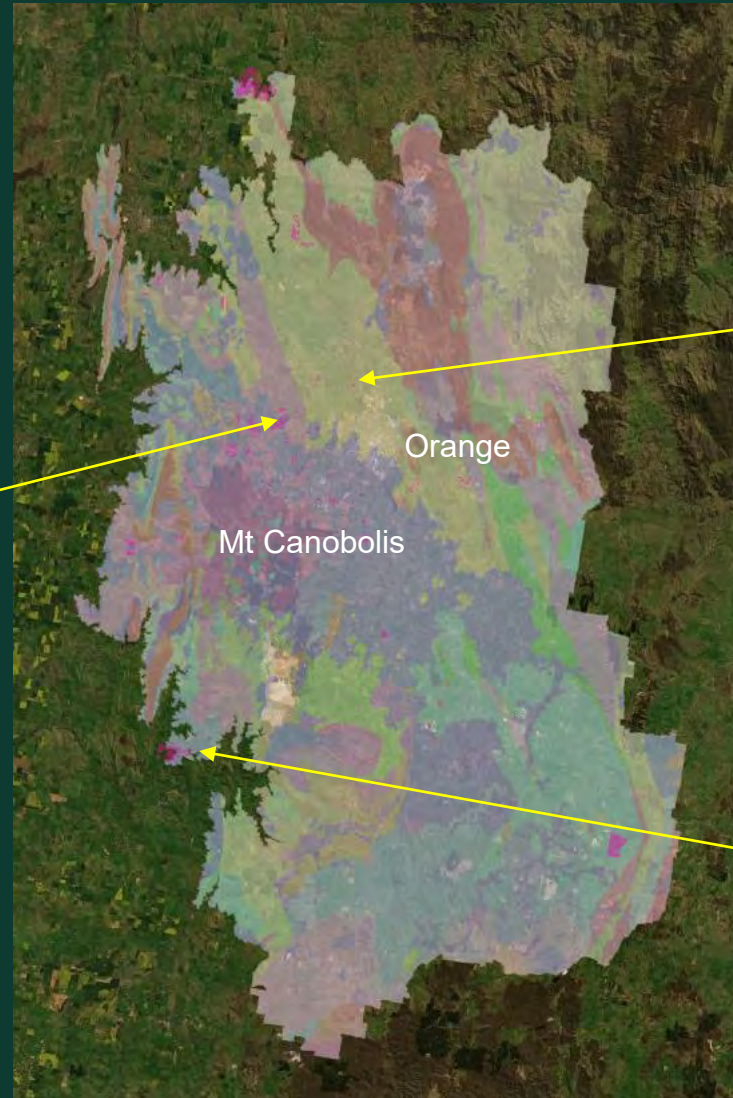
Trials at three contrasting vineyards established in 2019



Site 1: Balmoral Vineyard, See Saw Wines



Altitude: 878 m
Soil: Ferrosol



Site 2: Griffin Road Vineyard, Ross Hill Wines



Altitude: 758 m
Soil: Dermosol

Site 3: Angullong Vineyard, Angullong wines



Altitude: 610 m
Soil: Vertosol

2019 & 2020 Soil moisture monitoring: vine row and mid-row



Access tube installation for Sentek Diviner 2000 capacitance probe readings in 2019

10 tubes per vineyard – 4 x vine row, 4 x mid-row and 2 spare vine row tubes for later calibrations

Record seasonal soil water dynamics – Site 1 example

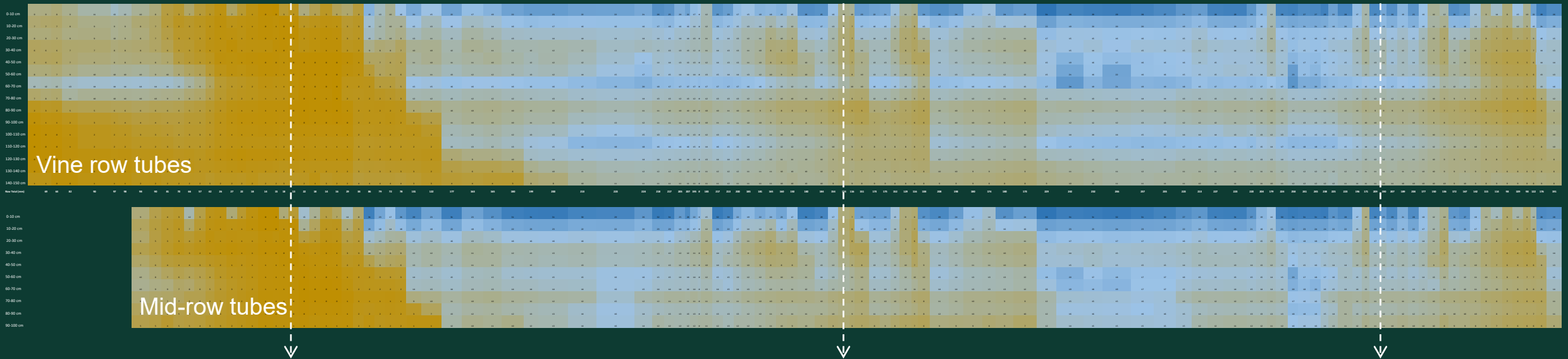


2019/20

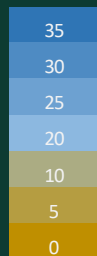
2020/21

2021/22

BB Sep 27 FL Nov 11 V 26 Jan H 25 Feb LF 4 May BB Sep 29 FL Dec 6 V 9 Feb H 8 Apr LF 21 Apr BB Sep 29 FL Dec 23 V 17 Feb H 26 Apr



Available soil water (mm)



23 Jan 2020

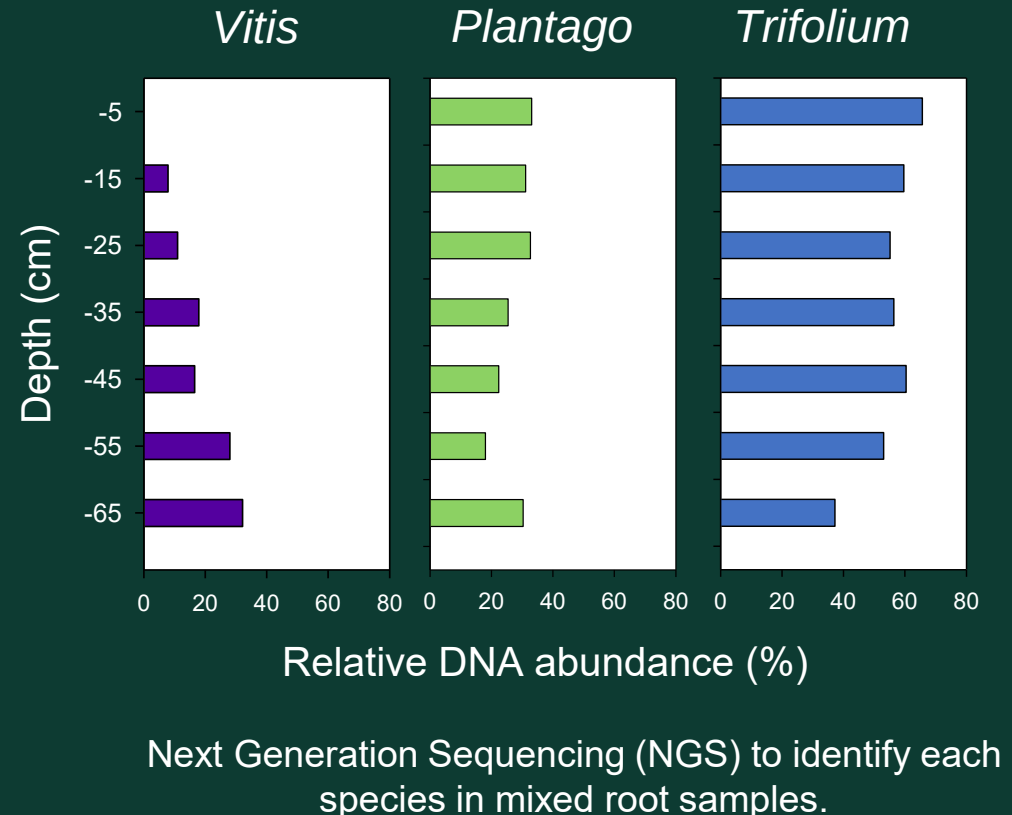
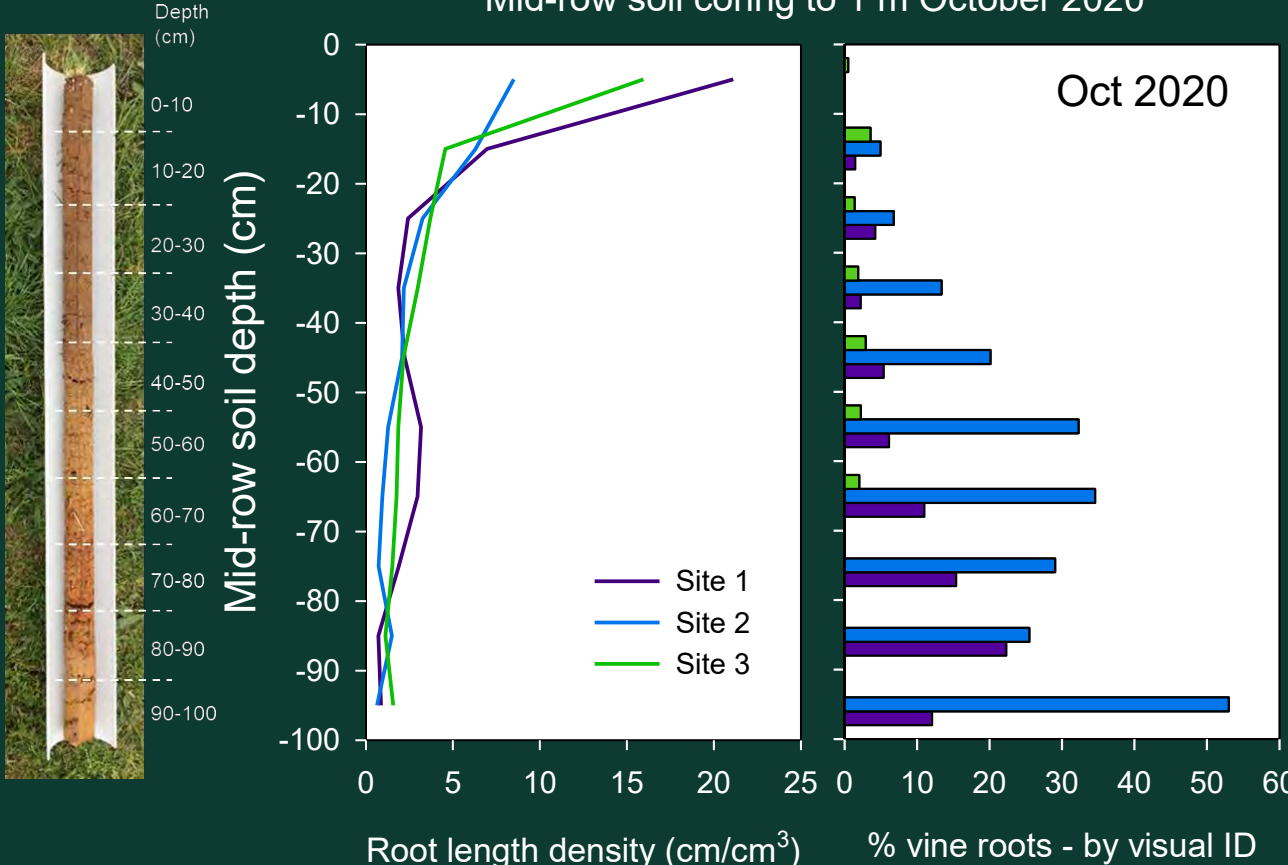


25 Jan 2021

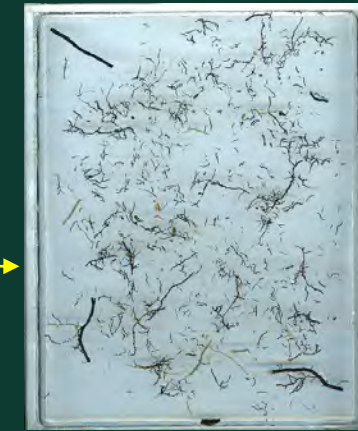
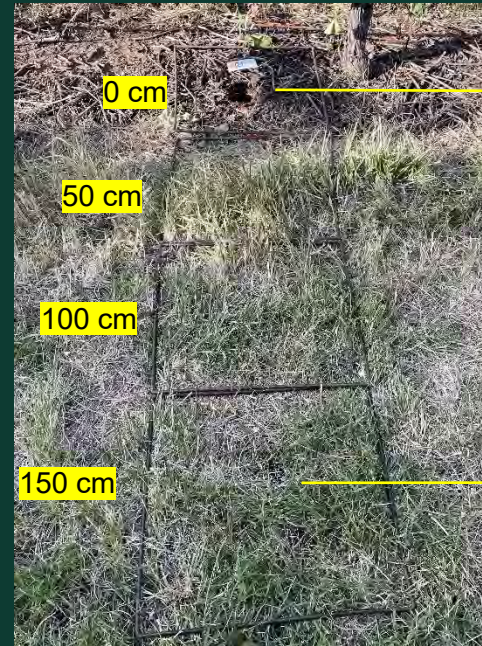


17 Jan 2022

Methodology for mapping root distribution by species



Influence of ground cover species and irrigation on root distribution



Root length
Root biomass
Total C and N
DNA / NGS

Collection of transect soil cores in January and February 2022

Aim to provide a 2D map from vine row to mid-row to a depth of 1.6 m

Water use traits of cover crop, pasture and volunteer plant species



Charles Sturt University Orange Campus



2020 & 2021 Automated instrumentation upgrade



Weather stations - 2020

Potential evapotranspiration
Rainfall and irrigation events

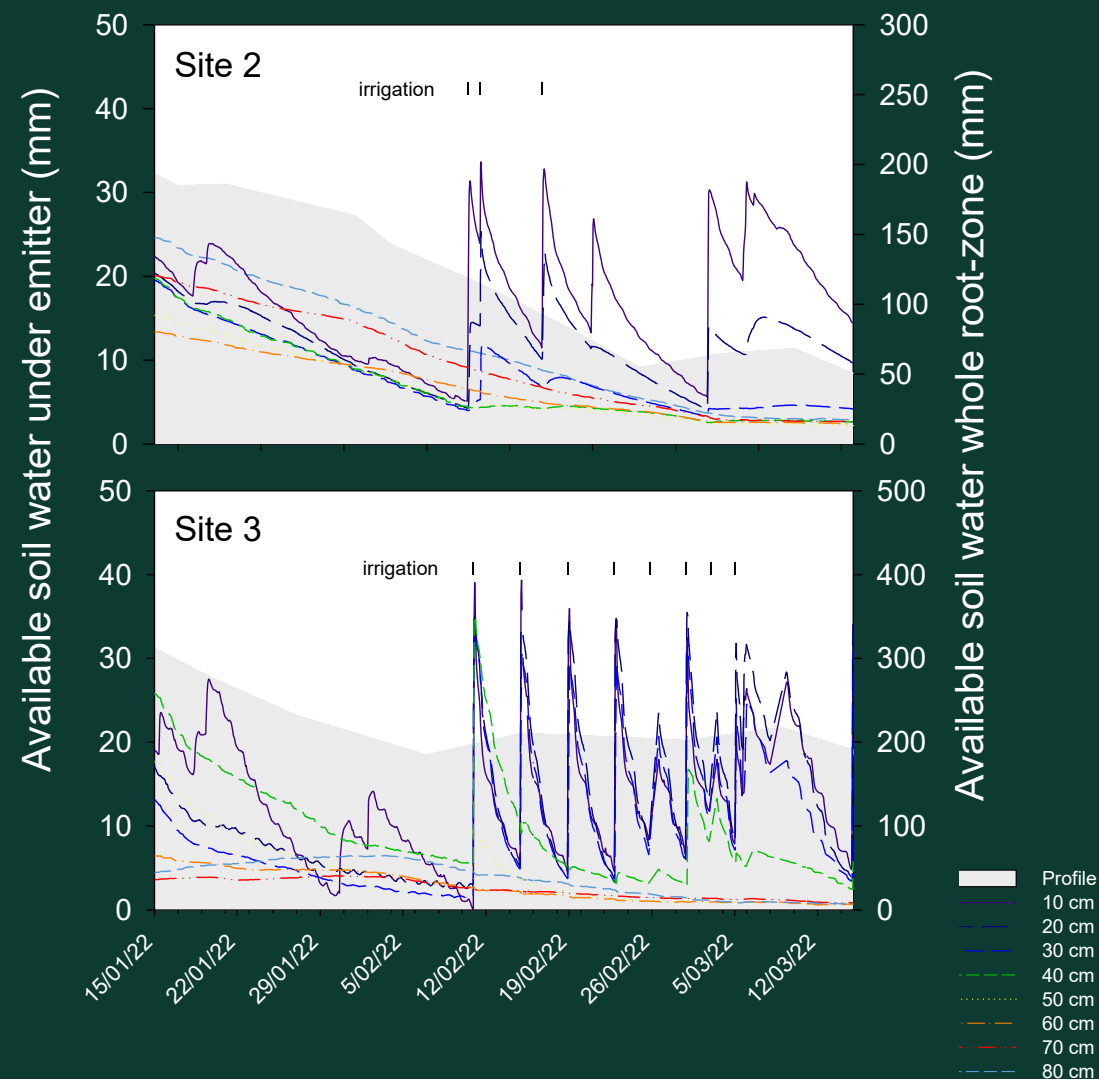


Sap flow gauges and automated soil moisture probe - 2021

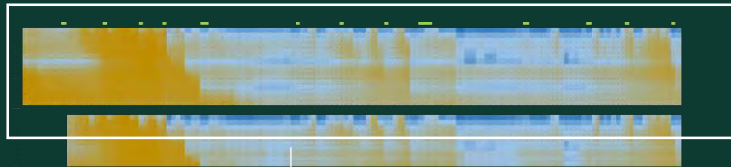
Whole vine water use – Grainer-type sap flow gauges
EnviroPro 80 cm capacitance probe under dripper
Stem water potential sensors



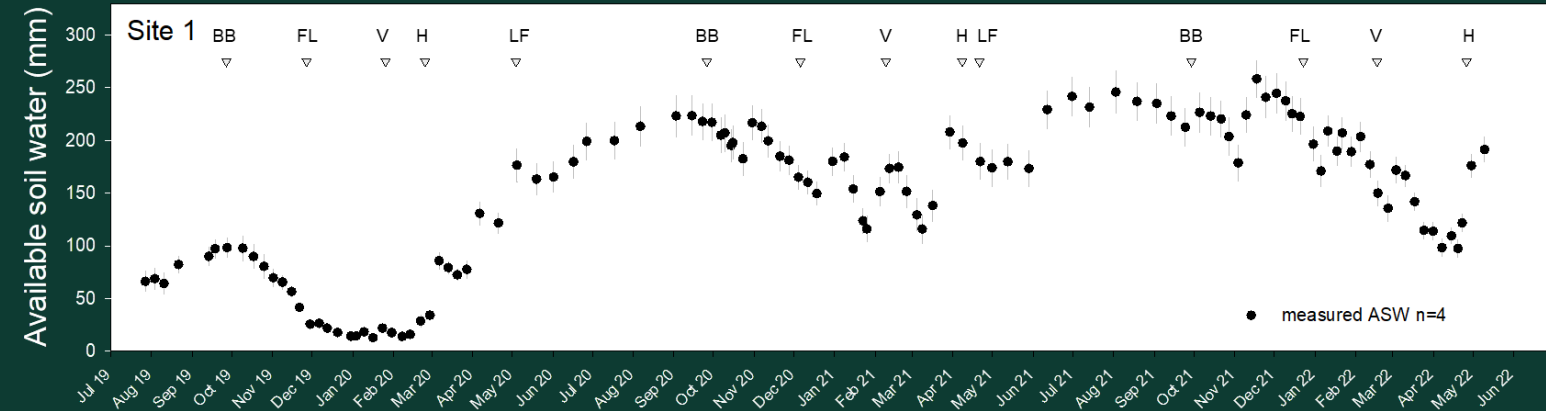
Soil water dynamics under drippers v rest of root-zone?



Combine all information and test management scenarios



Sum depths



Southern Hemisphere version of HGU water balance model – validate against measured data

Starting with Site 1 (rainfed, VSP, similar climate) and then Site 2 and 3 incorporating irrigation inputs

Test ‘what if’ management scenarios around floor management, root distribution, canopy, irrigation etc..

Longer term potential to test site suitability and regional responses to changing water demand



Acknowledgments and Thanks

See Saw Wines, Ross Hill Wines and Angullong Wines – Brendan Jarrett, Peter Robson, James Crossing and Jim Diprose for ongoing support with trial sites and a lot of valuable advice through the development of the projects.

Peter Hedberg, David McKenzie and Meredith Mitchell – for their time in providing advice on viticulture, soil science and pasture agronomy.

Di Hubbard for ongoing technical support with field and laboratory work, and Steve Gottschall for help with trial establishment in 2019.

Ginger Korosi and Isabel Orts Fiestas for a significant contribution to the molecular component of the project.



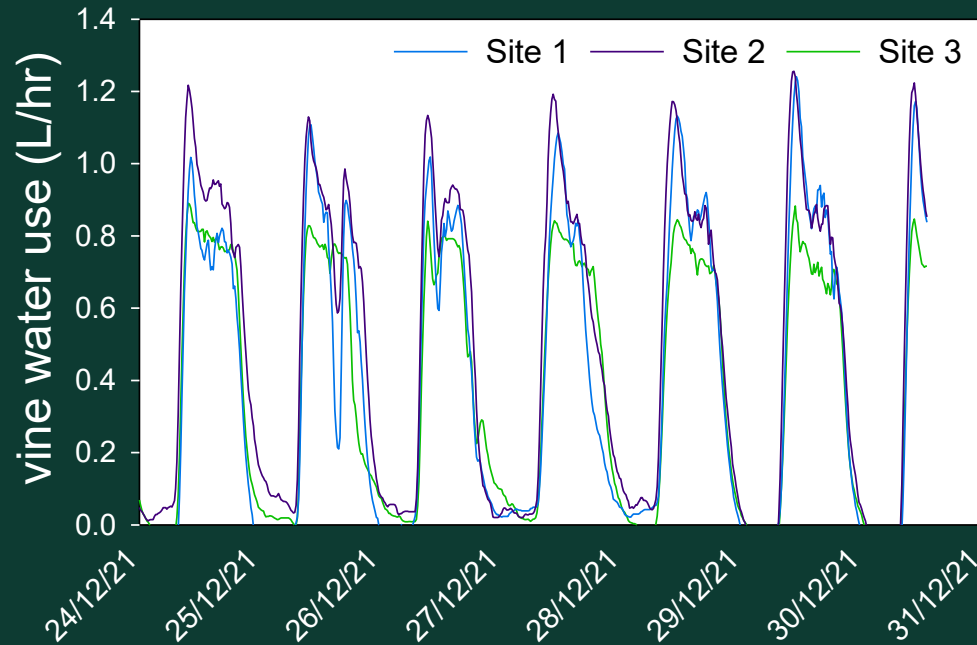


Background and research question

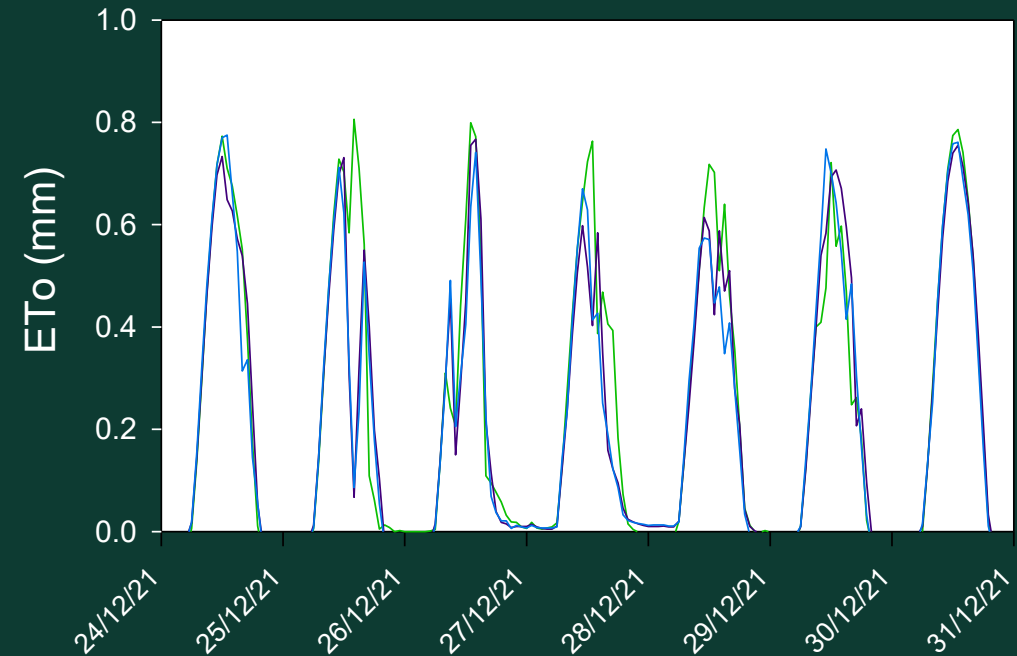


- Australia's wine regions are facing a warming climate and increased demand for water
 - What is the capacity to adapt to these changing conditions and reduce drought risk?
 - Research effort to date focussed on the warmer and hot climate irrigation regions
 - Less information for cooler climate vineyards where water situation can differ significantly
 - NWGIC project with Shiraz in the Orange Wine Region in 2019/20 and 2020/21 seasons
 - Extended and expanded with Wine Australia support for a further 2 seasons
- Today's presentation: a quick overview of the soil water component of this research

Direct measurement of vine water use



Daily transpiration comparison for the three vineyards

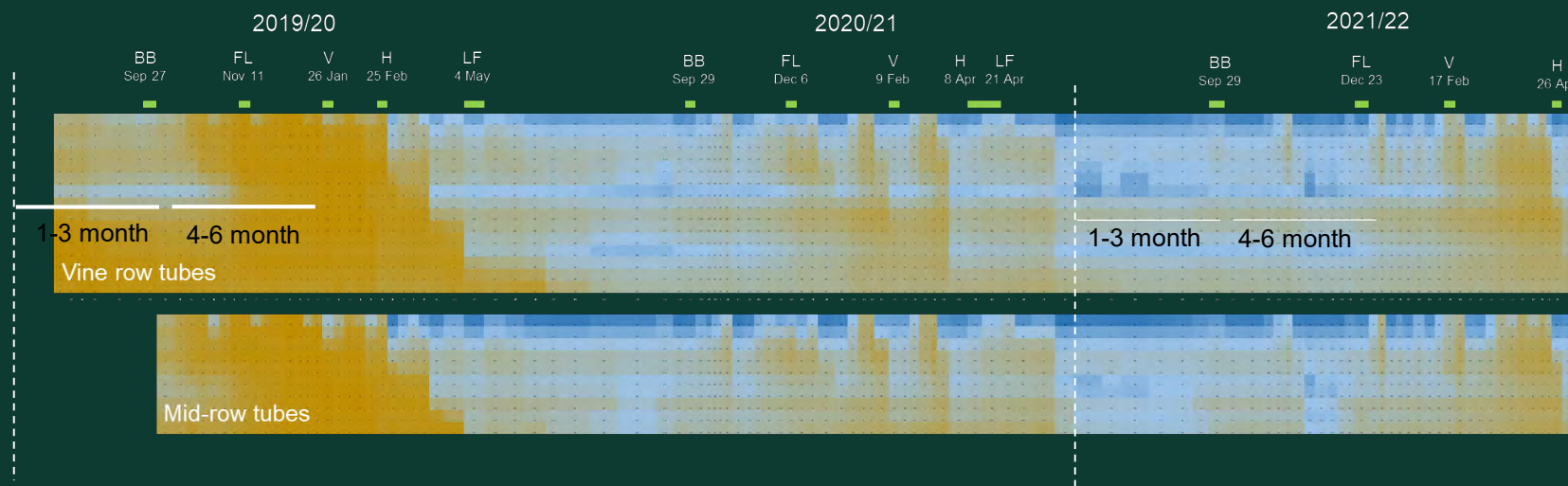


Corresponding ETo calculated by weather station

Retrospective review of seasonal forecasts



Compiled by:
Dale Grey
Seasonal Risk Agronomist

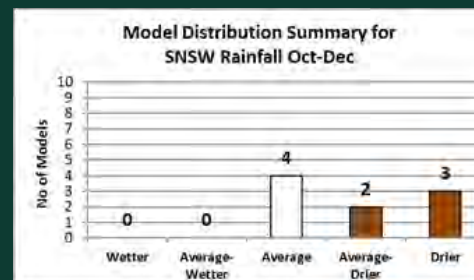
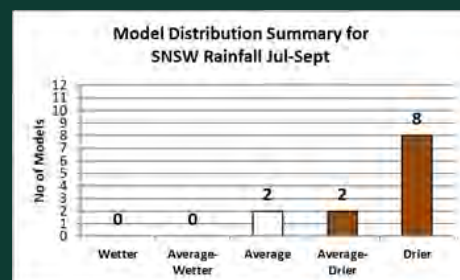


Coupled global circulation model forecasts

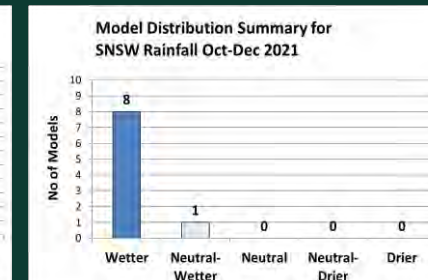
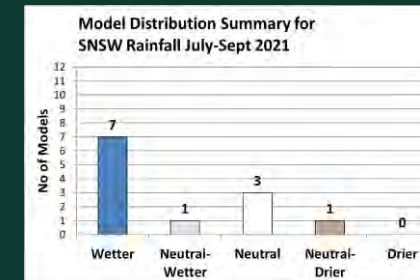
System 5 ECMWF Europe
ACCESS-S BoM Australia
SINTEX-F JAMSTEC Japan
CFSv2 NCEP USA
GEOS-S2S NASA USA
EPS JMA Japan
CSM1.1m BCC China
GloSea5 UKMO UK

Multi-model ensembles
NMME USA
C3S Europe
MME APCC Korea

Statistical
SOI phase USQ/QLd Australia



Model summaries produced in June 2019



Model summaries produced in June 2021