

Insights into Pinot Noir clone performance- own rooted and when grafted to rootstock

Nick Dry

Yalumba Nursery

Presentation Outline

- 2019 Tasmania clone trial data. Clone performance ➔ is new better or just different?
- Own roots v rootstock – the top, the middle and the bottom

Tasmania Data Collection- Background



Location: Pipers River, TAS

Vine age: 4 years (planted 2015)

Rootstock: 1103 Paulsen

Soil Type: Basalt with stone throughout profile, well drained

Planting Density: 1.25m x 2.3m =3500 vines/Ha

Block Layout:

Increasing level of surface rock across block



Abel	ENTAV- INRA® 943	115	ENTAV- INRA® 828	ENTAV- INRA® 667
Row 1-8	Row 9-17	Row 18-25	Row 26-37	Row 38-48

Viticulture:

- Cane pruned
- Shoot thinning (<30cm removed)
- Aiming for one bunch/ shoot

Do expectations of performance based on historical observations match this reality (at this site, in this year)?

General Viticultural Expectations:

- Abel- bigger bunch, later ripening
- ENTAV-INRA® 943- small bunch, low yields early ripening
- 115- mid-high yield, mid ripening
- ENTAV-INRA® 828- low yield, small berries, early ripening
- ENTAV-INRA® 667- mid-lower yield, mid-early ripening





Do expectations of performance match the reality (at this site, in this year)?

	Abel	ENTAV-INRA® 943	115	ENTAV-INRA® 828	ENTAV-INRA® 667	
Viti. expectations	high yield, bigger bunch, later ripening	low yield, small bunch, early ripening	mid-high yield, mid ripening	low yield, small berries, early ripening	mid-low yield, mid-early ripening	Average
Yield (kg/vine)	1.6	2.2	1.3	1.4	1.45	1.6
Bunch #	16	22	23	18	17	19.1
Bunch Weight (g)	98	100	58	77	89	84.4
Harvest Baume	13	12.8	13.1	12.7	13.3	13.0

Simple Answer.....

➔ Based on this season.....No...

But this is a good thing....

- Forseen issues with low yield and early ripening of ENTAV-INRA® 828 and 943 not evident
- More about impact on sensory profile than viticulture/yield components

Summary of Sensory Analysis

667

Quite bunchy, **Savoury complex notes** dominating nose, little fruit character and what's there is estery, like boiled lollies. **Structural**, acidic red cherry, lolly esters but the acid and tannin interaction giving structure.

Abel

Deeper, more brooding fruit characters, black cherry dominating. Round, fruit forward palate, quite upfront with lack of finish. Fleshy dark fruit characters on front palate with a **soft finish not much structure**.

943

Vibrant nose, Red cherry and distinctive spice but also incorporating the bunchy characters well – well balanced. All these characteristics follow well on to the palate with the **front and middle displaying great flavour and complexity**. Acid finish that **falls away structurally** but lingering berry flavour.

115

Really interesting nose that shows **spice, bunch complexity and cherry fruit notes** – not as vibrant as 943 but none the less still well balanced. Fleshy fruit notes on palate but looks a bit over ripe. Well balanced acid and **fine tannin structure**.

828

Vibrant black cherry and dark fruit notes **not offering a lot of complexity**. Strong acid tannin interplay providing strong structural backbone. Cherry fruit characters but again not a lot of complexity – **structure makes a great blending component**.

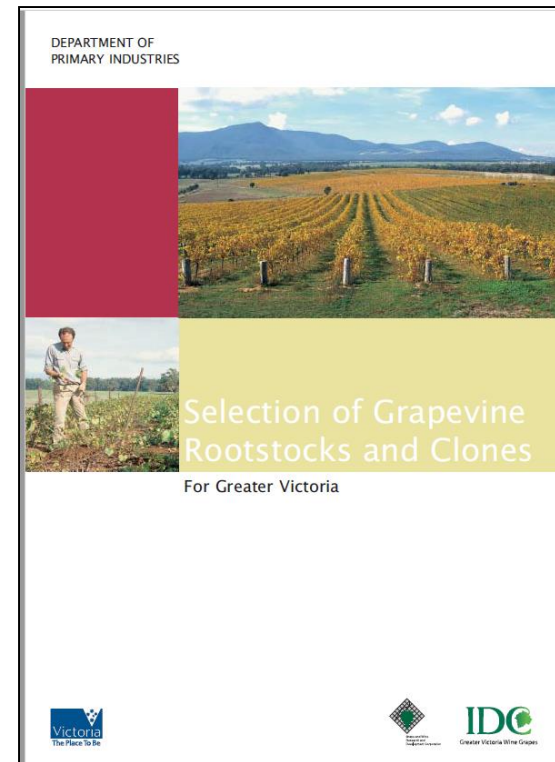
The point is....

- All these clones have quality potential
- Trial data can provide some general insights
- Every site is different
- Diversity is the key
- Need to consider a long-term clonal strategy to mitigate against climate change.

Own roots v Rootstock

We know there will be differences, we expect and desire differences.....

Analysis of Pinot Noir
Rootstock trial data
from.....



		Yield compared to Own Roots			
Location	Clone	Schwarzmann	5BB Kober	99 Richter	Ramsey
Drumborg	D5V12	=	<	<	>
Great Western	D2V5		=	=	>
Mornington Penn.	D2V5	<	<	<	<
Cogshills Creek	D2V5	<			
Porepunkah	MV6		>		>

Site has an impact on relative performance of a rootstock compared to a vine on its own roots

		Berry wt compared to Own Roots			
Location	Clone	Schwarzmann	5BB Kober	99 Richter	Ramsey
Drumborg	D5V12	=	>	<	>
Great Western	D2V5		<	<	=
Mornington Penn.	D2V5	=	>	=	>
Cogshills Creek	D2V5	<			
Porepunkah	MV6		>		>

Own roots v Rootstock

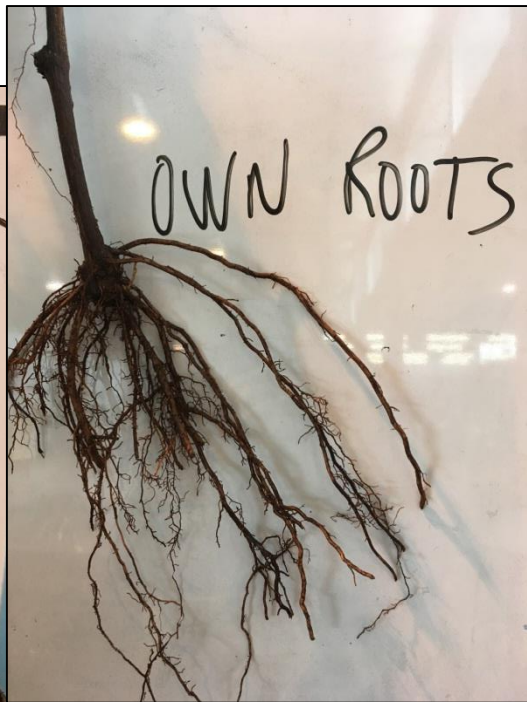
What is

The gra

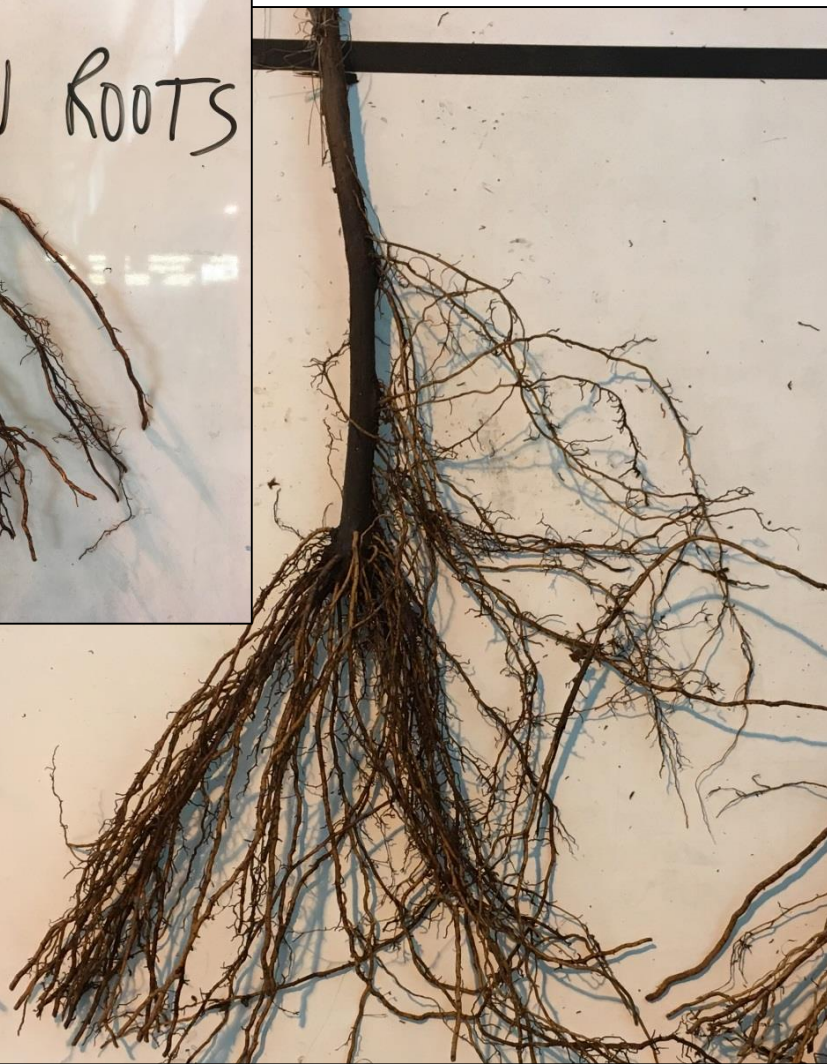
- Best c

Worst c





berlandieri
x
rupestris



riparia
x
rupestris



riparia
x
berlandieri

Final Thoughts...

Climate change is altering our genetic requirements

Outlier conditions we experience now inform us of the future reality

Pinot Noir is non -elastic

Understand the genetic performance at your site of clones and rootstocks in the outlier seasons