

SARMS Industry-led Research Sub Program

Longevity and sustained performance of
rootstock in Lower Murray horticulture;
viticulture and citrus

Mark Skewes
SARDI – Loxton Research Centre

SOUTH
AUSTRALIAN
RESEARCH &
DEVELOPMENT
INSTITUTE
PIRSA

PREMIUM
FOOD AND WINE FROM OUR
CLEAN
ENVIRONMENT

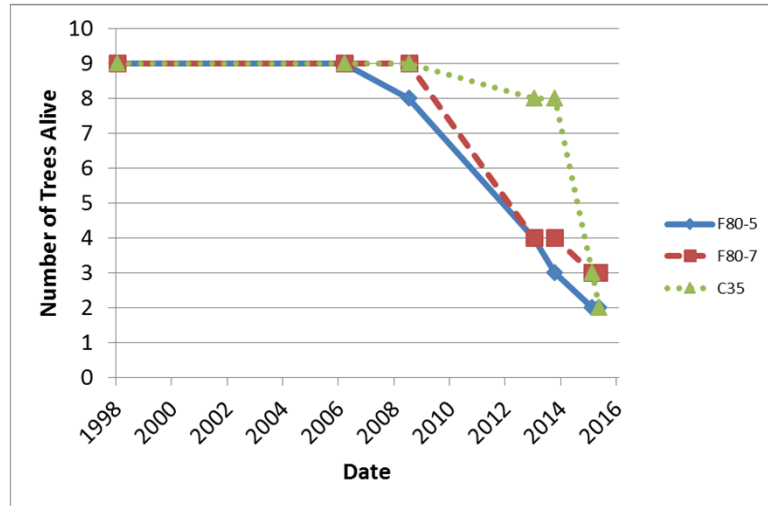


Navel Orange Rootstock Trial

	Navelina	Hockney	Summer Gold
Cleopatra Mandarin	✓	✓	✓
Sunki Mandarin	✓	✓	✓
Philipine Red Lime	✓	✓	✓
Santa Barbara Red Lime	✓	✓	✓
Troyer 341 Citrange	✓	✓	✓
C35 Citrange	✗	✓	✓
F80-5 Citrumelo	✗	✓	✓
F80-7 Citrumelo	✗	✓	✓

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Navelina Tree Deaths



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Navelina on C35 Citrange



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Navelina on F80-5 Citrumelo



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Navelina on F80-7 Citrumelo



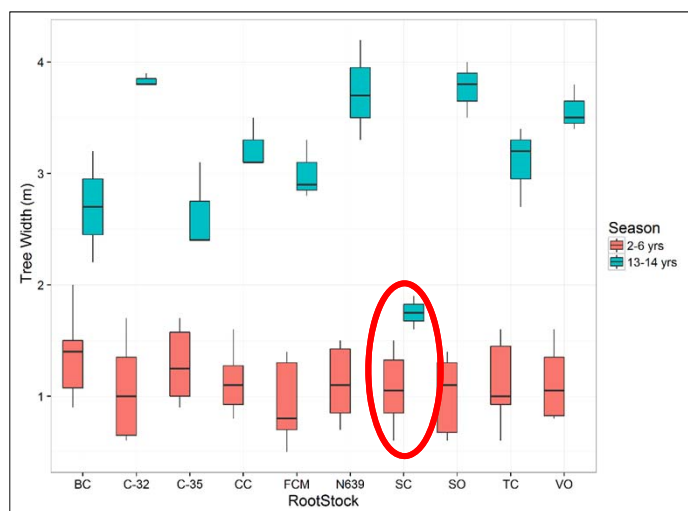
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Mandarin Rootstock Trial

	Afourer Mandarin	Murcott Tangor
Cleopatra Mandarin	✓	✓
Sweet Orange	✓	✓
Benton Citrange	✓	✓
Carrizo Citrange	✓	✓
Troyer Citrange	✓	?
C35 Citrange	?	?
Swingle Citrumelo	✗	✗
Nelspruit 639	?	✓
Volkameriana	✓	✓

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Afourer Tree Width



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Murcott on Swingle Citrumelo



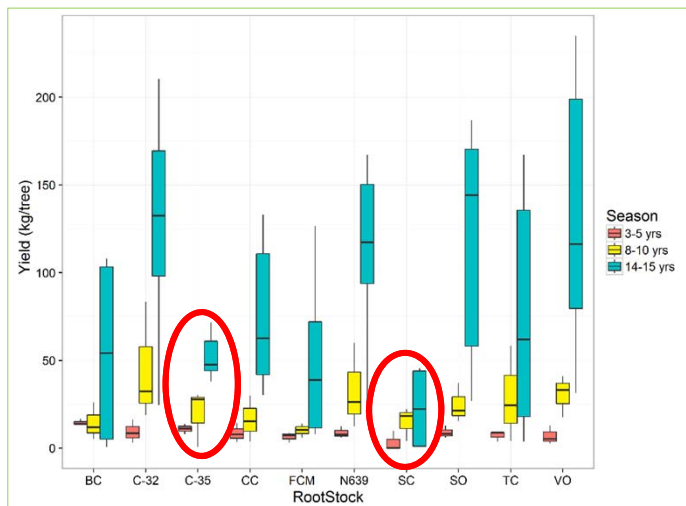
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Afourer on Swingle Citrumelo



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Afourer Yield



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Afourer on C35 Citrange



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Citrus Rootstock Summary

Rootstock	Navelina Orange	Hockney Navel Orange	Summer Gold Navel Orange	Washington Navel Orange	Afourer Mandarin	Murcott Tangor	Imperial Mandarin
Rough Lemon				7			
Rangpur Lime				5,6			
Philippine Red Lime		6	5,6				
Santa Barbara Red Lime			6				
Cleopatra Mandarin							
Emperor Mandarin							
Sunki Mandarin	5,6	5,6	5,6				
Sweet Orange				6			
Taiwanica							
Volkameriana				5,6	7		4
Trifoliata							
Swingle Citrumelo					2,4,5,6	2,4,5,6	2
F80-5 Citrumelo	1,2	5,6					
F80-7 Citrumelo	1,2,7						
Nelspruit 639					2		3
Benton Citrange				5,6			
Carrizo Citrange							3
Troyer Citrange						2	3
Troyer 341							
C-32 Citrange							
C-35 Citrange	1,2	5,6	5,6		2,5	2,4	3

- 1 – Incompatible combination, significant tree death
- 2 – Bud union exhibits creasing
- 3 – Overgrowth by the rootstock, potential for girdling
- 4 – Poor tree health
- 5 – Tree size reduced
- 6 – Yield depressed
- 7 – Poor internal fruit quality

Performing well
Some concerns
Not recommended

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