# primefact

## Mor mandari mandarin

March 2020, Primefact 1760, First edition

Dave Monks and Graeme Sanderson, Research Horticulturists, Dareton



Figure 1. A Mor mandari mandarin tree.



Figure 2. Mor mandari mandarins.

#### **Estimated maturity period**

Region	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Riverina												
Sunraysia												

#### **Origin**

The Mor mandari is a low-seeded Murcott mandarin developed in Israel by irradiation breeding. Mor has Plant Breeder's Rights (PBR) protection and is managed in Australia by the Australian Nurserymen's Fruit Improvement Company (ANFIC).

#### **Fruit quality**

Table 1. Mor mandari mandarin fruit quality\* characteristics.

Skin	Smooth, yellow-orange, easy peel.			
Average rind thickness (mm)	2.3			
Internal quality	Rich, sweet flavour with high juice content.			
Average number of seeds	2.5			
Juice per cent (%)	54			
°Brix	14.7			
Acid per cent (%)	1.0			
Brix:acid ratio	14.7			
Average fruit weight (g)	97			
Average fruit diameter (mm)	61			

<sup>\*</sup>Juice quality levels considered adequate for harvest and developed by sequential analysis of fruit from topworked evaluation trees.

#### **Comments**

- The Mor mandari mandarin is an Israeli developed, low seeded Murcott.
- Its tree habit is similar to its Murcott parent, requiring crop thinning to maintain fruit size and reduce alternate bearing.
- It is sensitive to sunburn with heavy fruit loss on the western side of the tree in southern Australia's high temperature conditions.
- Seed number was generally less than 5 per fruit, but higher seed counts have been recorded when trees are under strong cross pollination pressure.
- The maturity period is similar to the standard Murcott in southern Australia.

Table 2. Average yield per tree\* on nursery propagated field trees.

Rootstock	Average yield per tree (kg)						
ROOISTOCK	2010 (5-y-old trees)   2011 (6-y-old t		2012 (7-y-old trees)	2013 (8-y-old trees)			
C35 Citrange	26	3	20	3			
Citrange	42	11	17	14			
Cleopatra	2	16	12	10			
Swingle	56	16	42	9			
Trifoliata	37	1	36	8			

Table 3. Average yield per tree\* on trees top-worked to Valencia orange in 2005.

Rootstock	Average yield per tree (kg)							
	2009	2010	2011	2012	2013			
Citrange	26	70	29	34	46			
Cleopatra	30	49	20	23	20			
Trifoliata	36	68	32	50	38			

<sup>\*</sup>Average yield per tree results are from a small number of evaluation trees and should only be used as a general indication of the variety's potential yield.

There is some grower interest in the Mor variety, but there are a range of competing low-seeded Murcotts developed in Australia and available as managed varieties.

### Acknowledgements

Australian Nurserymen's Fruit Improvement Company (ANFIC)

Citrus Australia Ltd (CAL)

Department of Primary Industries and Regional Development, WA

Hort Innovation Australia



This project has been funded by Hort Innovation using the citrus research and development levy and funds from the Australian Government. For more information on the fund and strategic levy investment visit horticulture.com.au

Reference number: PUB20/167

State of New South Wales through the Department of Planning, Industry and Environment ("Department") 2020. The content has been developed by the Department using funds provided by Horticulture Innovation Australia Limited ("Hort Innovation").

The information contained in this publication is based on knowledge and understanding at the time of writing (December 2019) and was generated from field and nursery trees at Dareton Primary Industry Institute, Sunraysia, NSW, unless otherwise stated. Where quantitative data are presented (e.g. % Juice or rind thickness) they are based on measured properties. Where qualitative data are presented (e.g. thorniness or tendency to split), they are based on observations or brief notes recorded in the field.

Because of advances in knowledge, users are reminded of the need to ensure the information upon which they rely is up to date and to check the currency of the information with the appropriate officer of the Department and the user's independent advisor. Any reliance on the contents of the publication (or any part thereof) will be entirely at the user's own risk and neither Hort Innovation nor the Department will be responsible or liable for any loss, damage, cost or expense allegedly arising from any use or non-use of this publication.

Whilst care has been taken in the preparation of this publication, Hort Innovation and the Department make no representations and (to the extent permitted by law) expressly exclude all warranties regarding the accuracy, completeness or currency of the information, recommendations and opinions contained in this publication.