

Winola mandarin

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Figure 1. A Winola mandarin tree.



Figure 2. Winola mandarins.

Estimated maturity period

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

Origin

Winola mandarin is a triploid hybrid of Wilking mandarin and Minneola tangelo bred in Israel. Winola 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. Winola mandarin fruit quality* characteristics.

Skin	Red–orange. Pebbled and tightly adhered to the flesh, making it difficult to peel.
Average rind thickness (mm)	4.1
Internal quality	Dark orange flesh with rich flavour at full maturity. Fruit tends to have a high acid content (1.3–1.5%) until late August, affecting palatability. The average juice content over the estimated maturity period ranges between 45– 50%.
Average number of seeds	0.3
Juice per cent (%)	48
°Brix	13.0
Acid per cent (%)	1.25
Brix:acid ratio	10.4
Average fruit weight (g)	140
Average fruit diameter (mm)	68

*Juice quality levels considered adequate for harvest and developed by sequential analysis of fruit from top-worked evaluation trees.

Comments

- A few seeds were present in the first season of evaluation (2012), with an average of 0.4 seeds per fruit on a limited number of fruit quality tests.
- Winola is a triploid and produces low seeded fruit, but there are thorns on the trees, which is typical of triploid varieties. This thorniness might reduce in time and is not a reported feature of Winola in overseas literature.
- The initial crop produced on Winola was low and used for juice quality testing. Winola top-worked to Valencia on trifoliata had an average of 4.6 kg/tree and the resultant fruit size was large, with an average diameter of 83 mm. This decreased with higher crop load.

Table 2. Average yield per tree* on nursery propagated field trees (Sunraysia).

Rootstock	Average yield per tree (kg)
	2013 (4-y-old trees)
C35 Citrange	31
Citrange	24
Cleopatra	16
Swingle	27
Trifoliata	7
Volkameriana	45

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



Rootstock	Average yield per tree (kg)
	2013 (4-y-old trees)
Citrange	46
Cleopatra	34
Trifoliata	26

*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.

Interest in Winola has declined in Israel due to the difficulty in peeling and a tendency for alternate bearing. There is only a low level of commercial interest in Australia.

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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.

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