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Tangold mandarin

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Figure 1. A Tangold mandarin tree.

Figure 2. Tangold mandarins.

Estimated maturity period

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

Origin

The Tangold mandarin is an irradiated selection of W. Murcott Afourer mandarin that was developed by the University of California as Tango and marketed in Australia as Tangold. It has Plant Breeder's Rights (PBR) protection and is managed in Australia by Nu Leaf IP Pty Ltd.

Fruit quality

Table 1. Tangold mandarin fruit quality* characteristics.

Skin	Easy peel, orange, smooth to slightly pebbled.
Average rind thickness (mm)	3.3
Internal quality	Sweet flavour at maturity with good acid balance. Orange flesh colour.
Average number of seeds	0.1
Juice per cent (%)	44
˚Brix	11.6
Acid per cent (%)	0.82
Brix:acid ratio	14.1
Average fruit weight (g)	110
Average fruit diameter (mm)	66

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

Comments

- Tangold mandarin is the first irradiated selection of W. Murcott Afourer released for commercial planting. Extensive plantings have occurred in the USA with the variety being licensed and with a planting 'cap' in Australia.
- There is strong international interest in Tango with plantings to occur in China, Spain and several South American countries.
- It is very low seeded, even under heavy pollination pressure at the Dareton, New South Wales evaluation site. An average seed count of 0.1 seeds per fruit in the first cropping season (2013) was similar to levels recorded in California. An assessment in 2015 gave an average seed count of 0.14 seeds per fruit from a sample size of 320 fruit.
- Fruit production began three years from top-working to mature Valencia trees, as well as field planted nursery propagated trees.
- The tree habit is vigorous and initially upright, similar to W. Murcott Afourer.
- Initial maturity testing data in Australia suggests that Tangold may be earlier maturing than W. Murcott Afourer, due to a lower juice acid content.

Table 2. Average yield per tree* on trees top-worked to Valencia orange.

Rootstock	Average yield per tree (kg)					
	2013	2014	2015	2016	2017	2018
Citrange	30	20	67	59	95	103
Cleopatra	15	17	24	47	50	65
Trifoliata	20	34	75	116	128	126

*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.

Seedless fruit

W. Murcott Afourer can produce fruit without bee pollination and usually has near seedless fruit. Low seeded W. Murcott Afourer mandarin has become a major new variety for the Australia citrus industry.

Low seeded fruit is produced by:

- isolating commercial blocks from pollen viable citrus varieties
- growing trees under protective nets
- disrupting bee activity.

Tangold mandarin does not require isolation from pollinating insects to achieve seedless fruit.

There is strong commercial interest in Tangold mandarin 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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