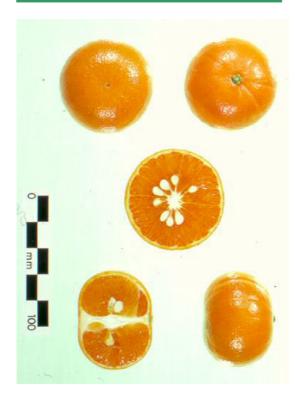
mandarin variety fact sheet

Murcott



Origin

Somewhat obscure, but believed to have originated from a US Department of Agriculture trial tree sent to a commercial orchard in Florida, from where a neighbour collected budwood and propagated trees around 1922. Started to become commercially important in the US around 1952. Believed to be a mandarin X sweet orange hybrid. Introduced into Australia illegally as budwood in the early 1970s, and then imported as seed in 1977.

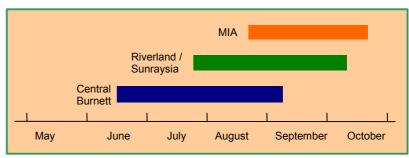
Type

Late season maturity, seedy.

Market

Fresh (some juice), domestic and export. This is the second most widely planted mandarin in Australia with extensive fruit supply to both domestic and export markets (principally SE Asia). The firm smooth skin and extended on-tree storage capacity of this variety make it well suited to export, and large scale plantings that can be harvested over an extended period of time. Good postharvest storage further extends the marketing season.

Marketing season (estimated)



Internal quality

The variety has good flavour with amongst the highest brix levels found in commercial mandarins. Acid levels can be excessive in some early season fruit, and conversely fruit can be too sweet for some palates late in the season. Growers can alter their harvest times to suit the preferred internal quality of different markets. High seed numbers (10-20/fruit) are a distinct disadvantage with this variety, though this is less important than eating quality in some markets. The variety has a high juice content (around 49%), with segments that are moderately easy to separate.

External quality

Fruit is medium to large depending on the extent of fruit thinning. The skin is very smooth and can be prone to marking and suturing. The colour is orange to deep orange. Fruit can be held on the tree for an extended period of time (>2 months) without significant deterioration, although "winey" flavours develop in very late fruit. In northern production areas, harvesting can occur during the coldest months of the year, and consequently there is a significant improvement in external colour as the harvest season progresses. The shape and smoothness of the fruit and tight adherence of the thin skin (3.5mm) make it difficult to peel.

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Postharvest performance

Fruit can be stored for an extended period of time given adequate postharvest treatments. This can be used to extend the marketing season as well as export opportunities.

Field performance

Trees are bushy and moderately vigorous. The variety requires a lot of management input. Fruit thinning is considered essential to maintain fruit size, prevent alternate bearing, and overcropping which can kill trees. Fruit is borne toward the ends of rather stiff branches, which aggravates sunburn of fruit and other skin blemishes.

A wide range of rootstocks have been used successfully with this variety. The high internal quality permits the use of vigorous rootstocks such as Rough Lemon in some situations. Other rootstocks such as Sweet Orange, Cleopatra, Troyer and Swingle have been used commercially without significant problems to date. (The incompatibility problems with trifoliata and its hybrids, like Troyer, reported in the USA have not been encountered in Australia). Cleopatra has been shown to delay maturity, which may be useful in extending the harvest season in large plantings. Sweet Orange has been shown to have a slight fruit size advantage over trees on Cleopatra and Carrizo. The heavy cropping potential, large high sugar fruit and late harvest season increase the nutrient requirements of this variety. Annual ground fertiliser application is commonly supplemented with foliar nutrient applications to satisfy plant requirements.

Pest and disease

The late maturity time of this variety means that fruit are exposed in the orchard for a long period of time. This increases pest and disease monitoring requirements and possibilities for spray damage to fruit. The capacity to retain fruit on trees late into the season may increase the likelihood of fruit fly attack. Alternaria can be a problem particularly in coastal production areas.

Extent of plantings

189,000 bearing: 250,000 non-bearing trees Commercial: Research: Widespread plantings in arboreta collections,

some other trial work.

State of knowledge

very very limited high

A variety that has gained enormous importance for both domestic and export markets within the last 20 years.

Disclaimer:

Information contained in this publication is provided as general advice only. For application to specific circumstances, professional advice should be sought.

Growers should ensure that trees are propagated from Approved Budwood obtained from AusCitrus.

Last Revised: September 2002











