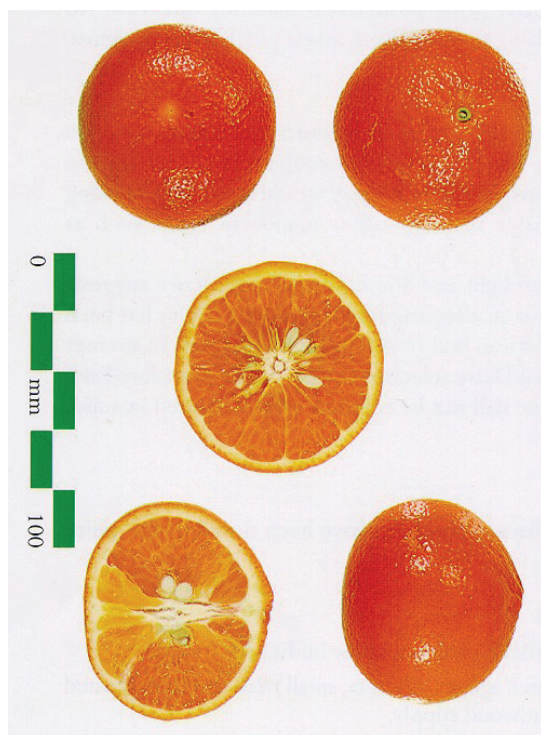# Daisy

Origin
California, USA: a hybrid mandarin recently developed by the US Department of Agriculture. It is a cross between Fortune clementine and Fremont mandarin. Imported into Australian quarantine 1991 and first released to selected nurserymen in 1995.
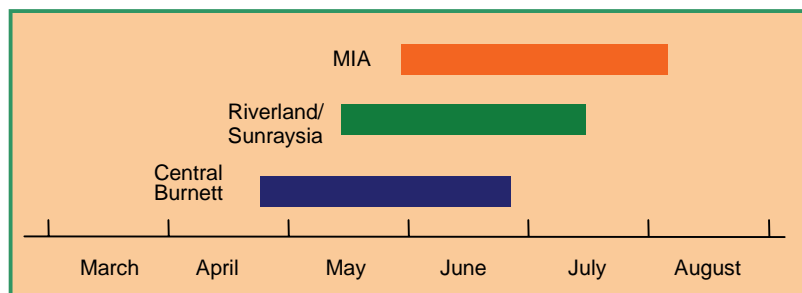
Type
Early to mid season maturity, seedy.

Market
Fresh, domestic. Very different in appearance to Imperial mandarin and would enter the market several weeks after the beginning of the Imperial season. May have export potential due to highly coloured skin, good eating qualities and its extended marketing period from on-tree storage. Daisy juice is also highly palatable with a complex flavour.

Marketing season (estimated)

	March	April	May	June	July	August
MIA						
Riverland/ Sunraysia						
Central Burnett						

Internal quality
Very good flavour with little rag and a sugar:acid ratio which has received favourable comments from preliminary taste testing. Acid levels do not decline significantly as the fruit ages on the tree. This helps to maintain flavour over a long period. The internal characteristics can be explained by the parentage of Daisy. Fremont (clementine x Ponkan mandarin) is an early, sweet mandarin. Fortune (clementine x Dancy mandarin), is a very late, high acid mandarin type and the blending of these two have produced an early/mid season, good quality mandarin. Seed number ranges from 15-20 per fruit. Segments separate easily.

External quality
Fruit is medium to large (6-8cm in diameter), round with smooth skin. Skin thickness is 4mm and is not difficult to remove. Skin colour is red-orange and almost 'glossy' in appearance. Fruit will hang on the tree for a long period without an obvious deterioration in external appearance. Internal quality begins to deteriorate by mid July in the Sunraysia region.

Daisy
mandarin variety fact sheet

Postharvest performance
Fruit can be hand 'snapped' from the tree in the early part of its maturity season. The potentially long harvest period and 'robust' nature of the fruit suggests it may have good postharvest handling qualities.

Field performance
Field grown arboretum trees produced fruit for the first time in 1996. Trees are vigorous, upright, open and thornless. Young trees on trifoliata, citrange, cleopatra and swingle rootstocks are strong and vigorous. The open, upright habit of Daisy would make tree training and shaping much easier than for other mandarin types such as clementines. Grafted Valencia trees on citrange rootstock have shown an alternate bearing habit, whereas trees on trifoliata produced more consistent yields. Crop load manipulation and selective pruning would help to reduce the alternate bearing habit. Fruit was able to tolerate temperatures of $46^{O}C$ in January 2001 without significant heat damage. Fruit is susceptible to albedo breakdown particularly on Trifoliata rootstock and overwet soil conditions. Soft new flush growth is very sensitive to spray damage and has been 'potch-marked' with zinc, manganese plus oil sprays in spring. Daisy has been included in the South African seed irradiation program to attempt to develop a low seeded Daisy selection. Daisy is also considered self fertile and seed number will not be reduced even if planted in solid, isolated blocks.

Pest and disease
Susceptible to Emperor Brown Spot (*Alternaria*).

Extent of plantings
Commercial
 Currently a very high demand for budwood.
Research
 Research agency arboreta, small trials and trees planted for budwood supply.

State of knowledge

very limited		very high

New variety to Australia that has created commercial interest. It is still being evaluated in South Africa and the USA. It has not been planted extensively in California and budwood was only released to the Florida industry in July 1997.

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

Last Revised: January 2002