
MOR MANDARIN



Ownership

Cultivar rights of Mor mandarin belong to the Plant Protection Marketing Board of Israel. Mor mandarin is protected by the Plant Breeders' Rights Act, 1976 (as amended), and unlawful propagation is not permitted.

Origin

Mor mandarin is an induced mutation of Murcott tangor from Israel. Consequently, the characteristics of Mor are similar to those of Murcott, with the exception that seed content of Mor is extremely low (0 to 2 seeds per fruit compared with 20 to 30 seeds per fruit in Murcott). Therefore, Mor is essentially a seedless Murcott and cultural practices should be applied accordingly. Murcott is already known in the market, therefore, advantage can be taken of this fact, with particular emphasis on seedlessness.



Numerous numbered selections were evaluated and the current status of these selections is:

Mor 15: good selection, but more seedy than selections 25 and 26. (Seed content of Mor 15 exceeds the Israeli Standard of an average of two seeds per fruit with a maximum of five seeds in a single Fruit).

Mor 22: Good selection.

Mor 25 and Mor 26: superior selections due to very low seed content

Vegetative Growth And Development

Mor trees are very vigorous with an upright growth habit similar to that of Murcott, reaching 4m height by year 8. The top half of the tree comprises long, vigorous watershoots, whereas cropping occurs in the lower half of the tree.

Like Murcott, Mor is incompatible with swingle citrumelo, but compatible with Troyer, Carrizo and C-35 citranges. Due to the inherently high eating quality and the moderate bearing potential of Mor, vigorous rootstocks Volkameriana and rough lemon can also be used.

Reproductive Growth And Development

Mor 15 has low pollen viability and is self-compatible, setting a few seeds even when isolated from other pollen compatible cultivars. Therefore, it is unsuitable as a buffer cultivar and needs to be isolated from cultivars sensitive to cross-pollination



Since Mor trees are vigorous, they are not heavy producers in the initial years of production, but do bear well when more mature. Mor also has a tendency for alternate bearing. Fruit size of Mor is very good, with nearly all fruit being caliber 2 and larger (>58mm diameter).

At maturity, rind colour is deep orange. Fruit shape is oblate, i.e. flat, but a high incidence of ribbing at the stem-end of fruit occurs. The rind of Mor fruit is exceptionally thin, and fruit splitting (up to 30% of fruit) and creasing are potential production problems.

Maturity is from mid August (mid to late February in the northern hemisphere) when internal quality and flavour are excellent; very high sugars (12 to 14% TSS) and moderately high acidity (1.2 to 1.3%), resulting in a well-balanced ratio and rich flavour. Fruit are very firm. The harvest period of Mor is relatively short, about 4 weeks.

Mor is susceptible to Alternaria brown spot, similar to Murcott, but less so than Nova and Minneola.

Climatic Suitability

Production regions where Alternaria brown spot is known to occur should be avoided, as well as hot, arid production regions.

Key Characteristics

Since Mor mandarin is an induced mutation of Murcott tangor, the characteristics of Mor are similar to those of Murcott, with the exception that seed content of Mor is extremely low. Therefore, cultural practices for Mor should be applied accordingly.

Like Murcott, Mor is incompatible on swingle citrumelo rootstock.



Vegetative vigour needs to be controlled and managed from planting.

Attention to orchard layout is essential to avoid unwanted pollination and consequent seediness.

Forcing young trees into production will be necessary.

Thereafter, crop manipulation will be less intensive than for other mandarin cultivars.

Maturity is from mid to late August.

Since Mor is susceptible to alternate bearing, crop load must be moderate to avoid overbearing.

Fruit splitting can be severe and needs to be controlled.

Production regions where *Alternaria* brown spot is known to occur should be avoided, as well as hot, arid production regions.

Tree with fruit	Leaf shape	Florescence