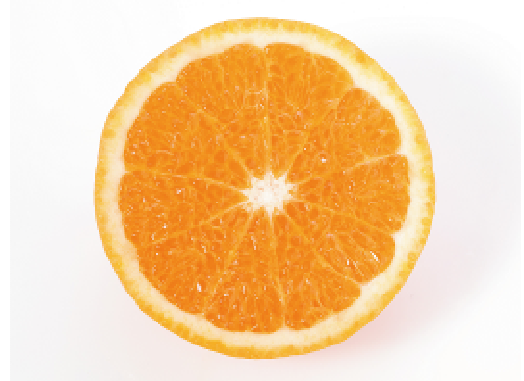


## ORRI MANDARIN



---

### Ownership

Cultivar rights of Orri mandarin belong to the Plant Protection Marketing Board of Israel.

Orri mandarin is protected by the Plant Breeders' Rights Act, 1976 (as amended), and unlawful propagation is not permitted.

### Origin

Orri mandarin is an induced mutation of Orah mandarin (a Temple x Dancy hybrid) from Israel.

Numerous numbered selections were evaluated, but there is little difference among selections. Or 1 is the main selection used in Israel, together with Or 3 and 4.

Other selections are Or 5 to 9. The superior selection, Or 4, has been named Orri.

### Vegetative Growth And Development

Orri trees are extremely vigorous with an upright growth habit similar to that of Mor. When in bearing, the top half of the tree comprises long, vigorous watershoots, which are thorny. Orri shows delayed incompatibility symptoms on swingle citrumelo, whereas C-35 citrange is considered to be an excellent rootstock for Orri, as are Troyer and



Carrizo citranges. However, trees on Volkameriana produce fruit of low acidity, which should be avoided.

## **Reproductive Growth And Development**

Orri has very low pollen viability, but is not completely pollen sterile. As a result, Orri is not suitable as a buffer cultivar. Also, Orri has the ability to set seeds (0 to 2 seeds per fruit), although it is considered to be seedless. Therefore, Orri needs to be isolated from pollen fertile cultivars to avoid excessive seed set. However, only a narrow buffer block is required for Orri.

Orri Flowers are relatively small and inconspicuous. Therefore, during flowering and fruit set, it appears as though there will be no crop, but this observation can be deceiving.

Since Orri trees are vigorous they are unproductive in their early bearing years, but bear well (40 to 45 t/ha) when in production. However, Orri does have a tendency for alternate bearing. Fruit size of Orri is generally good, but can be too small when trees crop excessively.

At maturity, rind colour is orange. Fruit shape is oblate, i.e. flat, with little or no ribbing at the stem- end of fruit. Orri fruit are susceptible to creasing, but not to splitting. The rind tends to be coarse when fruit are produced in relatively arid conditions, compared with more humid coastal conditions, and where Corasil E is used. Orri peels easily, easier than Mor, but leaves oil residue on one's hands.



Maturity is from mid to late January (S.H. = mid July)  
When internal quality and flavour are excellent; high sugars (10 to 12% TSS) and moderate to low acidity (1.0 to 1.2%), resulting in a well-balanced ratio and sweet flavour. Four to six weeks after harvesting, acidity drops rapidly. Orri has the ability to hang well on the tree and harvesting can be delayed by 10 weeks. However, the adverse effect of late harvesting on return bloom and the initiation of alternate bearing should be avoided. Orri is not susceptible to Alternaria brown spot.

#### **Climatic Suitability**

Hot Production regions should be avoided due to potential problems with fruit set and low acidity.

#### **Key Characteristics**

Volkameriana rootstock should be avoided due to low acidity.

Vegetative vigour needs to be controlled and managed from planting.

Although Orri has low pollen and ovule viability, Orri cannot be used as a buffer cultivar, and orchard layout must account for the possibility of seed set.

Forcing young trees into production by girdling is essential. Thereafter, crop manipulation will still be required.

Maturity is from mid to late January (S.H. = mid July)  
Although Orri has the ability to hang well on the tree and harvesting can be delayed by up to 10 weeks, acidity drops rapidly after harvest.

Since Orri has the tendency to alternate bearing, crop load must be moderated to avoid overbearing.



Hot production regions should be avoided due to potential problems with fruit set and low acidity.  
Orri is not susceptible to Alternaria brown spot.

Tree with fruit	Leaf shape	Florescence