

Volkameriana

December 2005, Primefact 22/184, First edition

NSW DPI Citrus Team



Advantages

- ✓ easily propagated
- ✓ rapid growth
- ✓ high and early yields

Disadvantages

- ✗ *Phytophthora* sensitive
- ✗ poor fruit quality

Origin

Of Italian origin and thought to be a natural hybrid of lemon and sour orange. Also known as 'Volkamer Lemon'.

Tolerance to environmental and soil conditions

Similar to Rough Lemon. Highly susceptible to *Phytophthora* with commercial instances of high tree losses in young plantings, even on virgin soils. Tolerant of citrus tristeza virus, and exocortis and xyloporosis viroids. Moderate tolerance to salinity and suitable for alkaline soil conditions. Like Rough Lemon, it is highly susceptible to blight.

Field performance

Produces vigorous and large trees capable of carrying heavy crop loads. There is some evidence that yields are slightly lower than from Rough Lemon.

Nursery performance

A very vigorous and fast-growing rootstock that is easily budded and rapidly available for field planting. Sensitivity to *Phytophthora* and requires a high level of nursery hygiene.

Fruit quality

Fruit quality on this rootstock is poor. With the possible exception of lemons, this makes it a poor choice for most situations. Trials in the Mediterranean climate of Harvey in West Australia suggest that fruit quality might be acceptable for some mandarin varieties, but caution is urged in extrapolating these findings beyond such climatic conditions. When used for orange and mandarin varieties the fruit have thicker coarser rinds, lower sugar, acid and juice contents and poor flavour. Granulation of Imperial and Nova mandarin on this rootstock can be extremely high.

Scion compatibility

Compatible with all commercial citrus varieties.

Extent of plantings

Used extensively in Australia for Eureka lemon in new orchard situations. Increasingly being used in place of Rough Lemon although there is limited local evidence to support the belief that it offers superior *Phytophthora* tolerance. In southern Australia this rootstock has been promoted as a part of the open-hydroponics production system, however longer-term effects on fruit quality are yet to be determined.

Overseas experience

Predominantly used in situations where Rough Lemon has performed well in the past.

Reference number: PUB22/184.

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