

Other Varieties

These varieties can be grown for you under a Forward Supply Agreement.

- Azapa
- A'Prugno
- Barouni
- Californian Queen (UC13A6)
- Carolea
- Hardys Mammoth
- Hojiblanca
- Kadesh
- Moraiolo
- Nabili Mouhasan
- Sevillano
- Sourani
- South Australian Verdale

Olive Grove, Nelson



Performance

While every care is taken to ensure varieties perform as described, variation in performance can be affected by a number of factors including climate, soil types, tree management and genetic make-up.

Much of our knowledge is gleaned from both overseas sources and local growers, with little first hand experience of our own. We are constantly updating our data as New Zealand results come to hand. Please feel free to ask for further details on any particular variety you are interested in.

Ordering

The ordering process depends on the quantity ordered and stock availability.

We have access to other varieties than those listed that we are happy to grow for you under a Forward Supply Agreement.

Useful Contacts for Olive Growers

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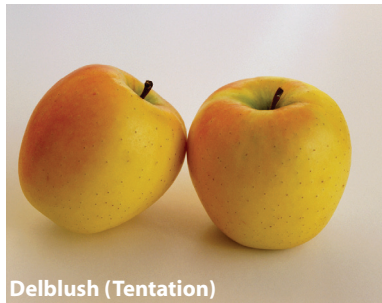


Olive Varieties  
for Professional Growers



## About Waimea Nurseries

The Simpson name has been synonymous in the nursery and fruit industries in New Zealand since the early 1900's, but it was in 1971 that Doug Simpson and his wife Georgina founded Waimea Nurseries Ltd. Their son Michael joined the company in 1977 and is the current Managing Director. Waimea Nurseries is now New Zealand's leading fruit tree nursery for professional growers with current annual production of 800 000 rootstocks and 450 000 trees. The nursery covers approximately 60 ha on the Waimea Plains, with up to 70 staff, including 35 permanent employees.



## Variety Development

During the 1990's many varieties were introduced into New Zealand for trial, many of which proved unsuitable and problematic in the New Zealand environment. The varieties Waimea Nurseries are now growing are those which have been proven as performing well in most areas of New Zealand.

## Commitment To Growers

Waimea Nurseries is committed to the long-term future of New Zealand's olive industry and seeks to respond to market conditions accordingly. Waimea Nurseries has been at the forefront of the development of high density planting systems in New Zealand, with the introduction of key dwarf varieties.

## Involvement In The Olive Industry

Waimea Nurseries has been involved in olive tree production since its inception in the 1970s. As commercial interest gained momentum in the mid-late 1990's, Doug Simpson responded by importing a complete range of the world's best selections. We have continued this progression offering the best selections to the olive industry in NZ with the development of FS17. In our long experience in the tree fruit industry the progression to high density planting and mechanisation has grown to be an important part of any crops evolution.



## Olives In New Zealand

The olive (*Olea europaea*), traditionally the symbol of peace and tranquillity, is a long-lived, evergreen tree providing shade and food to those who nurture it. It is a member of the Oleaceae or ash family and thrives in warm temperate to sub-tropical regions similar to the Mediterranean basin from which it is native. Olive trees are generally easy care plants. Trees live for many hundreds of years and there are profitable commercial plantings in Spain that are over 200 years old.

### Climate

While the olive tree has a wide range of adaptability there are cultivars much better suited to some conditions than others. Without a good winter chilling many varieties fail to initiate flower buds. However some cultivars, such as Azapa, Koroneiki and Chemlali bloom and fruit with very little winter chilling, so are suited to warmer areas. In the colder regions of New Zealand where winters also start early, the fruit may fail to fully ripen especially with later maturing selections. Variety selection in such areas is especially critical. Young olives trees can be injured by cold winds and hard or unseasonal frosts. Only a few selections as mature trees can withstand temperatures below -10°C without damage. The hardiest varieties include Leccino, Picual, Picholine, Frantoio, Sourani, Moraiolo and Pendolino.

### Soils

Olive trees will grow on poor soils but deep reasonably fertile soils produce the best quality fruit. Research suggests that elements such as nitrogen, potassium and boron are most important for commercial olives so a soil test 6 months prior to planting is recommended when a grove is been established. They prefer soils that are in the slightly acid to neutral range (pH 6-7 optimum). Olives detest wet feet so soils must be free draining.

### Planting

In New Zealand Olives have been mainly planted 3m - 6m apart and 5m - 6m between rows to allow for machinery access in the future. Spacing does depend on factors such as variety vigour, the amount of pruning intended and both the training and picking methods to be employed. Planting time will depend on a number of factors. As another general rule autumn planting is recommended in areas not prone to harsh or very wet winters. Spring planting is best in areas where winters can be severe. Other factors to take into consideration to help decide best planting times include age of stock, availability of irrigation and seasonality of strong, potentially damaging winds. The NZ Olive Association have found that after-care is the greatest stumbling block to olive tree establishment. Weed control, attention to irrigation needs, adequate staking, pest and disease control must be attended to.

### Irrigation

The olive is considered a drought-resistant species because it thrives in areas where water stress is frequent. However irrigation is likely to be needed to maximise growth and eliminate stress during flowering, fruit setting and as the fruit increases in size. Over watering can cause health problems for olive trees. Research is also showing that over irrigation in autumn can delay harvesting while doing nothing for increasing fruit size or quality (see notes on Harvesting).

### Pruning

There is still much debate on how best to train and prune your olive trees. Different cultivars have different growth habits and so training techniques will vary. Trees should be developed into an open vase shape with the typically low developing branches radiating out in an even pattern. Once trained, minimal pruning is required to maintain a mature specimen, often requiring only minor branch thinning and dead wooding. All pruning is best done either in late winter/early spring or at bloom time.

### Harvesting

Like all fruit, olives perform best when picked at the right time for the purpose. As different varieties of olives perform best when pickled at different maturities you need to either experiment or research best picking times for your table selections. Oil olives should be harvested as soon as possible after they have become fully ripe. The NZ Olive Association suggests that this is when half the olives have turned black. As olives ripen, the quality of the oil within changes. Commercial growers maybe best advised to use lab testing for oil and moisture content to judge when exactly to harvest.

### Pickling

Whether green or black, perfect unbruised olives are best for pickling. Keep them cool. These can be prepared in plain brine or oil or combined with virtually any herb you care to name. Processes and recipes abound and each grower will hopefully develop their own unique blend that best works for them.

### Pollination

Pollination requirements do vary between the different Olive varieties. While several of these varieties can be classified as self fertile, the majority of olive trees greatly benefit from cross-pollination so groves should have a mix of cultivars inter-planted for this purpose. Olives are wind pollinated. As such Olive pollination can be affected by climatic factors such as heavy rains and strong or no wind during the flowering period.

## Olive Varieties Performing In New Zealand

### Barnea

Oil & Table  
From Israel. Quick growing erect variety. Prolific producer when conditions are right, but has failed in many areas of NZ especially where subjected to cold winters. Fruit medium size and pointed. Recommended pollinators are Picholene and Manzanilla. Oil yields around 17% have been experienced so far in New Zealand. Can be pickled black for high quality fruit.

### Chemlali

Oil  
From Tunisia. Prolific producer of smaller fruit with excellent oil properties. Performing well in many parts of New Zealand and showing up very well in NZ Tree Crops Association trials. Shrubby, high health and easy care plants.

### Frantoio

Oil  
From Italy. The worlds best known oil-producing olive that is renowned for its flavour. Proven performer in many parts of New Zealand and featuring strongly in a number of award winning oils. Medium size oval even-ripening fruit with excellent oil content and quality. Later ripening, self-fertile and vigorous grower with good resistance to disease. Good pollinator.

### Kalamata

Oil & table  
From Greece. The most famous of black eating olives but also makes an excellent oil. Elongated fruits, asymmetric shape, freestone with a fruity flavour and meaty texture. Strong, vigorous tree, resistant to some cold, medium hardiness. Sensitive to extremes. Best for the warmer parts of New Zealand. Limited availability due to difficulty with propagation.

### Koroneiki

Oil  
From Crete. Highly regarded self fertile olive. Prolific and regular cropper. Fruit is small but with excellent oil properties. High health and easy care. Very tolerant of strong sea breezes once established.

### Leccino

Oil  
From Italy. Tuscan selection proving an excellent performer in many parts of New Zealand. Very cold and disease hardy. Very good cropper with excellent oil properties. Features strongly in award winning oils. Only draw backs are not self fertile and can suffer wind damage due to vigorous top growth. Pollinators include Pendolino, Moraiolo and Frantoio.

### Manzanilla

Oil & table  
From Spain. Reputed to be the world's best dual purpose olive. A small tree with spreading canopy. Medium oval fruit with brilliant purple skin changing to blue black with excellent texture when mature. Prolific and early bearer. Oil percentage very disappointing so far. Also problems with hardiness in the colder parts of New Zealand.

### Pendolino

Oil  
From Italy. Tuscan variety highly regarded as a pollinator. Also it is reputed to be a very good oil producer while to date cropping has been good oil percentages have been disappointing. Attractive weeping habit.

### Picholine

Oil & table  
From France. Small, elongated fruit. Skin light green changing to wine red then red black. Heavy and regular cropper. Popular gourmet table olive often pickled green. Oil quality and yield is very good. Upright tree with good resistance to cold and disease but fruit is later ripening. Good pollinator.

### Picual

Oil  
From Spain. Main oil variety in that country. Highly rated for its early bearing, high productivity and oil properties. Strong, spreading grower with resistance to cold and wet soils but ripens too late for marginal areas.

