## **Wild Olive (olea europaea sub africana). – by Jonathan Cain** INTRODUCTION

European Olive is believed to have been in cultivation since at least 3000BC. The tree is regarded as a symbol of life and peace. It's wood is extremely hard and makes valuable furniture. The fruit is edible. The leaves make tea and snuff. It has played and important role in the historic development of the SA with towns, areas and streets being named after it, Oliewenhoutplaat, Oliewenhoutsnek and Oliewenhoutsbosch. The tree is believed to live beyond 2000 years. The Olives from the Garden of Gethsemane are still alive today.

## TAXONOMY AND DISTRIBUTION

The family Oleaceae has 30 genera and there are 600 species world wide with 6 species being recognised in South Africa.

- 1. Olea exasperata. Dune Olive. National tree No 619. Suitable for bonsai. Small multi stemmed tree found on sand dunes in close proximity to the sea from the Eastern Cape to the Cape Pininsula.
- 2. Olea woodiana. Forest Olive. National tree No 620. It is almost totally confined to the Indian Ocean coastal belt.
- 3. Olea chimanimani. Found in the Chimanimani mountains of eastern Zimbabwe.
- 4. Olea welwitschii East African Olive. A large tree to 30m found along the African tropics from Northern Zimbabwe to Ethiopia to west Africa Guinea.
- 5. Olea capensis Ironwood. National Tree No 618. Found throughout Africa. Suitable for bonsai.
- 6. Olea europaea subsp. Africana. Wild Olive National tree no 617. Being the most widely spread tree is the most popular for bonsai and the basis of the rest of this article.



- a. Appearance
  - i. Evergreen tree up to 14m.
  - ii. Bark is smooth grey on younger branches and flaky on older branches.
  - iii. Leaves are smooth glossy green above and matt dull green below. Leaf stalk up to 10cm long. Can be reduced to 3 mm with constant pruning.



- b. Reproduction
  - i. Has a tiny white flower 6-10mm wide with a green fruit of less than 10mm across. It is a fleshy fruit with an internal pip.
  - ii. Seed germination should take place in 8-12 days after sowing.
  - iii. Cuttings less than 10mm need to be treated with root
  - stimulating hormones. No success with any cutting larger.
- c. Pruning
  - i. Essential for small leaves and ramification. Very little die back so tight pruning is possible. Foliage may become very dense and is an ideal place for insects and pests.
  - ii. Because of the alternating pairs of leaves it is a good species for "Clip and Grow"
  - iii. Large wounds will not heal and if removing a large branch rather make a feature like a jin or a shari.
  - iv. The wood is extremely hard and rigid with a dry weight 1100kg/m3. (Natal Mahogony 600kg/m3, Hardekool 1200kg/m3). Idea for carving.
- d. Wiring
  - i. Wiring before the branches get too rigid ie within 1 year of growth. Shape should be retained after 3 months of wiring.
- e. Repotting
  - i. Any time of year, but best from August to November.
  - ii. Deep pot is best otherwise branches tend to die.
  - iii. Dark natural coloured pots suite the best or dark red.
- f. Feeding
  - i. Throughout the year with a general fertilizer. Foliar feed the undersides of the leaves. Does well when fed with bone meal.
- g. Pests
  - i. Wooly aphids hide under the bark, crevices, dry leaves and wiring. Control with Malathion.
  - ii. Scale can be scratched off or killed with Malasol.
  - iii. Psylla, is the most common pest and hide in the dense foliage on the undersides of the leaves. The symptoms are yellowing of the leaves and eventually the leaf falls off. Can be controlled by at least 3 sprays of Malasol over a month. The undersides of the leaf must be sprayed where they can be seen to be hiding.



- iv. Ants protect aphids from their natural enemies. If ants are seen there are aphids and/or scale.
- v. Other reported pests are red spider mite and white fly.
- h. Soil

- i. Grows any most mixtures of soil in the wild . In bonsai it likes well drained soil. Suggested mix 70% inert stone or washed sharp river sand. 30% fine sifted compost, pine bark or seedling mix.
- ii. The olive also appears to like loam- red sand, possible because of the water retention properties of loam. The problem with loam is that it may come with weeds.
- iii. PH should be alkaline above 7. Bonemeal will raise alkalinity.
- i. Watering
  - i. Can withstand long periods of drought.
  - ii. Watering well in one season will produce good results in the following season.
- j. Collected trees.
  - i. Best place to get stock, due to the slowness of growth.
  - ii. Stressed trees can take 3 years to generate leaf growth.
    - 1. A boost of heat in a hot house often brings the tree out of dormancy.
    - 2. Placing the collected tree in a plastic bag also produced the hot house effect.
    - 3. Brewers yeast is also said to stimulate the tree.
    - 4. Placing a hessian bag over the tree takes away light so the tree has to produce leaves to photosynthesis.

Growth starts after the roots have re-established themselves i.e. when leaf growth starts the roots have stared as well and the tree is not simply using its internal stored energy.

- iii. Treatment by putting the collected tree in full water with medicine (Kickstart) helps rejuvenate the tree. Waite for the moisture to appear on the branch wounds before sealing the wound.
- iv. Rough styling may start once the tree has showed signs of recovery. Do not disturb the roots as this will set you back.
- v. Collected trees often have dead wood.
- vi. Root hormone treatment (dip & grow, Seradex) helps reestablish the trees roots.
- k. Climate/placement
  - i. Love full sun.
  - ii. Are frost hardy.
  - iii. If grown in partial shade watch out for thrips.
  - iv. Moving from sun to shade will have no dramatic effect. Moving from shade to sun will cause all the leaf burn, leaf drop, then leaf replacement. Moving from inside to outside and vice versa will cause leaf drop until the tree re-acclimatises.
  - v. Leaves in full sun miniaturise and thicken compared to shade or inside.
  - vi. Olives had survived for over 150 days in offices, with regular water. Trees survived with foliage.
- l. Styles
  - i. Informal and slanting with gins and dead wood most popular
  - ii. Group planting and forest popular
  - iii. Root over rock no as the tree tends to loose branching and ramification.
  - iv. Formal upright yes
  - v. Cascade seldom