

## Timber Fact Sheet No.1



16 year old teak at Anatafa, West Kwara'ae, Malaita Province

## Teak (*Tectona grandis*)

### Uses

- Furniture making
- Construction (including ground contact and exposed situations)
- Boat building

**Basic density (plantation grown):**  
650-750 kg/m<sup>3</sup>

**Rotation age:** 25-35 years

**Propagation:** Easy to grow from seed or obtain cuttings from nursery.

**i Silviculture:** Plant 1250 stems/ha (4m x 2m), reduce to 600 s/ha at canopy closure and in 100 s/ha increments until 200s/ha. Thinnings will produce useful timber. Pruning improves quality but not necessary (branches shed naturally).

### General

Teak is a species which is highly recommended for many situations in the Solomon Islands. It is a timber which is highly regarded in the international marketplace and both logs and sawn timber can be sold in shipping containers to overseas buyers for good prices. In 2002 small plantation logs (2.1m log and small end diameter of 150mm underbark), loaded into a container at Noro were sold for \$750/m<sup>3</sup>. 200x25mm boards can be sold for \$2000/m<sup>3</sup> loaded into a container at either Honiara or Noro.

It is also a timber which is useful in a village or town. The heartwood is resistant to rot and can be used for fence and house posts. Thinnings can be used either in the round or sawn and for firewood. The timber is quite easy to saw using a chainsaw frame mill or a portable sawmill and the timber dries without major distortion. Timber can be used for all construction and joinery and is good for making furniture because it is easy to work with.

Established trees are resistant to fire.

### **Nursery**

Soak the fruit (which contain up to 4 seeds) in water for 24 hours and dry in sun for one day. Sow in bed of clean, moist river sand to a depth of 3mm with the helum (stalk end) down. Do not cover or shade. Keep bed moist. When plants have two real leaves they can be transplanted into pots or into nursery beds. New transplants must have 70% shade for one week and then reduced to 30% for another 2 weeks. After that the shade can be removed altogether. Water regularly until the plants are established and growing well then the watering can be reduced. Seedlings are ready to plant when the diameter at ground level is more than 5mm. This generally takes about 3 months after transplanting.

Plants can also be produced from cuttings. These can be obtained from the KFPL Nurseries. Check with your local nursery.

### **Silviculture**

Teak is a light demanding species so they should not be grown in the shade of other trees. It can be grown on grassland if there is black soil.

Teak should be planted relatively closely otherwise the trees can get very large branches and forks. Trees are best planted in rows 4 metres apart with a spacing of 2 m between trees (1250 trees/ha). It is important to keep the trees well weeded.

When the trees reach about 4m in height then half of them can be removed. The ones that are not straight or are not growing well must be removed to give space for the crop trees, this will leave around 600 trees/ha.

When the trees have a diameter of 15cm at chest height then every 6<sup>th</sup> tree can be removed to leave around 500 trees/hectare. There may be an export market for these trees or they can be used for posts and poles and for firewood. This thinning can be repeated every 4 or 5 years. When the trees have a diameter of about 60cm at chest height they can be clearfelled and replanted. This is commonly at about 30 years if they have been regularly thinned.

### **For further information**

Please contact your local Forestry Division Forest Extension Officer, the Community Relations Forester at EPPL Arara, or the Community Relations Forester at KFPL.

Your local Forest Extension Officer is \_\_\_\_\_