# Casuarina cunninghamiana

Casuarinaceae

## N.E. Australia, Pacific Islands

Am: Shewshewe, Arzelibanos

Eng: Australian beefwood, River oak, River she-oak

Or: Shawshawe

# **Ecology**

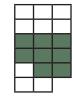
Introduced to many tropical areas from its native Australia where this tree is found along streams and rivers and prefers welldrained soils. In Ethiopia, it grows in Moist and Wet Kolla and Dry and Moist Weyna Dega and Dega agroclimatic zones, probably in all regions of Ethiopia, 1,300-2,800 m. The most commonly grown of all casuarina.

## Uses

Firewood, charcoal, timber, poles, posts, fodder (young branchlets), shade, ornamental, mulch, soil conservation, nitrogen fixation, windbreak.

## Description

An evergreen tree to 20 m, pyramidal in shape when young, the base wide when mature and a shady crown. BARK: Greyblack, much cracked with age. Thin branchlets have taken over leaf function in this family—leaves are minute scales at each joint. Branchlets thin, soft, 9-20 cm long bearing 7-9 white-tipped leaf scales in each of the whorls, branches upturned. FLOWERS: Male flowers are seen as yellow pollen-bearing tips to branchlets and female flowers are tiny heads with hairy red stigmas on woody branches. FRUIT: In dense cluster, prickly brown and cone-like, 1 cm long. They ripen and shed hundreds



of winged seed, pale in colour.

# **Propagation**

Seedlings. Nursery soil where casuarina are to be raised may need inoculation by addition of soil from beneath mature trees.

#### Seed

Collect cones at maturity, just before they open to release seed. Then dry cones on a cement floor or plastic sheet so seeds are released. Move around for cones to release seed, then remove cones and collect seed. Seeds prolifically. Germination rate 55-90%. 530,000–1,600,000 seed per kg.

**Treatment**: Not necessary.

Storage: Seed can be stored for up to a year.

## Management

Side prune to get a clear bole. Always add soil from below old trees for root nodule formation. More fast growing than C. equisetifolia at higher altitudes.

## Remarks

Fairly fast growing. In Australia, branchlets are used as fodder when nothing else is available (hence the name "beefwood"). The wood is very hard and thus difficult to saw and season, though it is susceptible to termite attack. The special root association with a fungus enables the casuarina to fix nitrogen.



