

Tree Seed Information Leaflet



Eucalyptus grandis

Species: *Eucalyptus grandis* W.Hill

Family: Myrtaceae

Common name: Flooded Gum

Local names: Muringamu, Munyua-mai (Kikuyu)

Description: *Eucalyptus grandis* is a very tall tree up to 60m with a straight clear bole. Bark is grayish-white or bluish-grey, smooth and peeling in strips. Leaves are grayish-blue, long and curved. Flowers are white in pointed capsules. Mature capsules are brownish, small with 4-5 in curved valves, containing very many tiny seeds

Distribution: The species is native to eastern Australia and is planted in medium to high potential areas between 1,200-2,000m above sea level.

Flowering and fruiting: Flowering and fruiting occur throughout the year with two peak seeding season in January/February and July/August.

Seed collection method: The mature brownish capsules are collected from the crowns of standing trees using experienced climbers or from crowns of felled trees when seed collection is synchronized with timber harvesting. Ripe capsules or twigs containing capsules are handpicked or cut using looping shears, hand secateurs or hooks.

Seed extraction and drying: Capsules are sun-dried by spreading on canvas sheet and turned regularly. They are then threshed lightly to release the seeds. The extracted seeds are cleaned using sieves to remove capsules, small twigs, leaves and other impurities. Seeds of this species are usually mixed with tiny and similar looking chaff that is difficult to separate from the pure seeds. Seeds can be sun-dried to the required moisture content of less than 10% before storage or distribution.

Seed weight: There are 300,000 seeds per kilogram but only a purity of about 20 to 40% can be achieved.

Seed storage: Seeds can be stored in airtight containers in cool dry place for 1-2 years with no significant loss of viability.

Seed Sowing and Germination: Pre-sowing treatment is not necessary. Seeds germinate readily within 7-21 days.

Sowing seeds of this species is tricky due to their tiny size. It involves mixing the seeds with fine dry sand/soil 2-3 times its volume and broadcasting the mixture thinly and evenly on a well-prepared seedbed (sand or a mixture of sand and soil). The seedbed is then covered with light mulch (dry grass). Watering is done regularly (morning and evening) checking daily for any emergent seedling. Mulch is removed immediately germination starts. The young seedlings are transplanted when they are large enough to handle (4-5 leaves) to soil mixed with NPK fertilizer at the rate of 30-40grams per 20liters of soil. Seedlings are planted out when they are 30cm tall (4-6months).

End Uses: The wood of *Eucalyptus grandis* is used for timber (construction and furniture), poles, posts, and ply board, firewood and charcoal.

For more information contact

The Director
Kenya Forestry Research Institute
P.O. Box 20412 - 00200
Nairobi

Tel: +254 722 259 778/2
+254 722 157 414
+254 734 251 888

E-mail: kefri@nbi.ispkenya.com

Website: www.kefri.org