

Acrocarpus fraxinifolius Wight ex Arn. (LEGUMINOSAE, CAESALPINIOIDEAE)

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A very large, light-demanding, deciduous, tree, growing up to 60 m tall (DBH to 2.4 m). The crowns of older trees often emerge above the forest canopy.

Where does it grow?

In E. India, S. China, Myanmar, Thailand, Laos, Vietnam, Borneo, Sumatra and Java. In N. Thailand, it is rare in EGF at elevations of 1000 to 1200 m.

What are its distinguishing characteristics?

Larger trees with buttresses. **Bark:** grey, with brown lenticels. **Leaves:** doubly pinnate; leaf segments 4-14 x 2-7 cm, ovate; young ones pink and hairy. **Flowers:** bisexual, in dense panicle clusters on leafless branches, petals red; January to March. **Fruits:** pods, black, elongated and flattened, 8-16 x 1-2 cm; seeds, 10-18 per pod, ovate, light brown 4.6-6.8 x 3.4-4.2 mm; February to May; wind-dispersed.

Why is it a framework species?

Planted *A. fraxinifolius* saplings grow rapidly (>2 m by end of 2nd rainy season) and develop crowns broader than 2 m across, which effectively shade out weeds, but survival is marginal. This species coppices readily and regen-

erates well after fire (70% survival of trees with RCD >20 mm, burnt 21 months after planting). Its nectar-rich flowers attract birds and squirrels and it is favoured by birds as a perching site.

How are saplings grown?

Collect black pods, March to April. Air-dry them until they split, releasing the seeds. Chip away part of the seed coat with nail clippers or put seeds in sulphuric acid for 5-10 minutes. Sow seeds in trays in full sunlight; GP c.50%; MLD can be reduced to 4 days with above treatments. Seedlings are prone to damping-off and attack by caterpillars, so take appropriate precautions. Pot seedlings after first true-leaf pairs expand and stand containers in sunlight. Saplings usually grow tall enough (>30 cm) for planting out by 2nd planting season after seed collection (TNT 15-16 months). Alternatively, store seeds at ambient temperature, then treat and sow them in November.

How should saplings be planted and cared for?

Survival can be substantially increased by laying cardboard mulch at planting time and by continuing weeding and fertilizer application into the dry season.

What can this species be used for?

Its durable timber is prized for house construction and furniture and is used as firewood and to make charcoal. The foliage makes good cattle fodder. Planted for shade in coffee plantations; to stabilize river banks and terraces and to increase soil nitrogen content.

