

# 1. *Dalbergia oliveri*

## Taxonomy and Commercial Grade

Cambodian name	: Neang Nuon
Scientific name	: <i>Dalbergia oliveri</i>
Synonym	: <i>Dalbergia dongnaiense</i> Pierre <i>Dalbergia bariensis</i> Pierre
Family	: Fabaceae
Sub-family	: Faboideae
Commercial Grade-Cambodia	: Luxury

**Distribution and Habitat:** Present throughout Cambodia, Laos, Thailand and Vietnam (Dy Phon, 2000), trees of *Dalbergia oliveri* occur individually or in groups of 5 – 10 trees, and usually in evergreen tropical forests or semi-deciduous forests that are dominated by *Lagerstroemia* and dipterocarps. The species is usually found at low altitudes (< 900 m), and generally in moist areas, along streams and rivers, and on hill sides. Trees can tolerate some level of shade at an early age, but they generally prefer light. Individuals of this species often produce many seeds, but natural regeneration is often poor due to low germination rates or disadvantageous weather and site conditions. Trees generally grow slowly in both natural and man-made forests (CTSP, 2001).



Within Cambodia, this species is found in Kratie, Preah Vihear, Kampong Thom, Ratanakiri, Stung Treng, Pursat and Siem Reap (Khorn, 2002; see map).

**Gene-Ecological Zones:** Northern Cardamoms (B), Northwestern Lowlands (D), Central Lowlands (d), Lower Mekong Floodplain (E), Central Annamites (G).

**Botanical Description:** *Dalbergia oliveri* is a medium to large tree species that reaches from 20-25 (-35) m high (CTSP, 2001) and produces boles from 50-60 cm in dbh in dense forests of Ratanakiri (So Thea, 2002, per. comm). The wood is hard and heavy, with a wood density of 1.07-1.15. The wood produces attractive veins (CTSP, 2001) and is resistant to termites. Commercial varieties differ according to the colour of wood, some which are rose-yellow, brown veined, red with black veins, or purple streaked with yellow (FIPI, 1996). This species branches at an early age and maintains this feature as an adult. It produces compound pinnate leaves that are 15-18cm long, and 8-13 leaflets. Leaflets are 3-5 cm long and 1-2cm wide (CTSP, 2001), and taper narrowly at their tips.

**Flowering and Fruiting Habit:** Flowering at the end of March to the beginning of June, the fruit ripens at the end of June-November (CTSP, 2001).

**Fruit and Seed Description:** The fruit, a legume, generally produces 1-2 seeds (CTSP, 2001).



**Seed Collection:** The seed is mature when the pod has changed in colour to dark brown. However, the beans can also be collected as soon as the pod turns from green to yellow in order to minimize insect predation. Seeds are collected with a tarpaulin underneath the tree as the branches are shaken or cut. Maturity can be confirmed by a cutting test.

**Uses:** Easy to polish, the wood is widely used for making high quality furniture, luxury cabinets, art and handicrafts, decorations etc.

**Current Status:** Due to its economic value, *Dalbergia oliveri* is facing serious depletion by illegal cutting. The number of remaining individual trees is very low, and these are disappearing on a local level. In many areas of its natural range, mature and large sized trees are rarely to be found. Efforts to regenerate the species on a large scale have been few and limited. The species is facing the possibility of extinction if no effective protection measures are taken (CTSP, 2001).

In 2002, the second CTSP meeting on the Forest Gene Conservation Strategy defined *Dalbergia oliveri* as a priority species, and one that is in need of immediate conservation interventions and appropriate protection. This species is protected by Cambodian Forestry Law No.35.

**IUCN Classification:** EN A1cd



**References:**

- Cambodian Forestry Law No. 35, 25<sup>th</sup> June 1988
- CTSP, Cambodia Tree Seed Project, 2001, Some Endangered Species of Cambodia, unpublished

- FA, 2002 (draft), List of Trade Names of Commercial Wood in Cambodia, Trade Names of Commercial Woods, unpublished
- FIPI. Forest Inventory and Planning Institute, 1996, Vietnam Forest Trees
- Khorn, S, 2002, Distribution of Selected Tree Species for Gene Conservation in Cambodia
- Ministry of Agriculture, Forestry and Fisheries, 1986, Decision No. 050 SSR.KSK: Wood Classification and Minimum Diameter for Allowable Cutting, 12<sup>th</sup> September
- So Thea, Manager of CTSP, 2002 pers.comm.
- The UNEP World Conservation Monitoring Centre, 2002, Red List for Cambodia,
- CTSP Seminar, 29 Jan. 2002 on Forest Gene Conservation Strategy

