

7. *Dysoxylum loureiri* Pierre

Taxonomy and Commercial Grade

Cambodian name	: Mrah-prao Phnom
Scientific name	: <i>Dysoxylum loureiri</i> Pierre
Family	: Meliaceae
Commercial grade-Cambodia	: Luxury

Distribution and Habitat: Distributed in lowland forests, especially abundant along the Southwest coast and adjacent highlands of Cambodia. The species is endemic to Cambodia and southern Vietnam (Dy Phon, 2000), and prefers evergreen, primary or secondary forests. It usually on basalt, sandstone, and sandy clay soils (FIPI, 1996). In Cambodia, the species occurs in Koh Kong, Pursat and Kampong Thom (Khorn, 2002; see map).

Gene-Ecological Zones: Coastal Cardamoms (A), Northern Cardamoms (B), Northwestern Lowlands (D).

Botanical Description: A large tree up to 20-35 m high, with short-hairy branches. The wood is light yellow in colour, aromatic, incorruptible, but apt to split in high temperatures (Dy Phon, 2000). The leaves are bi-pinnate, the petioles 30-40 cm long. 5-9 leathery leaflets occur in alternate or opposite pairs, ranging from 12-13cm long and 4-4.5 cm wide. Leaflets are round, with an asymmetrical base and acuminate apex. They possess 10-14 pairs of curved-ascending nerves (FIPI, 1996).

Flowering and Fruiting Habit: The flowering branches of *marah-prao* are about half as long as the leaves. Eight stamens are united into a short tube, and these are shortly hair below. The style is umbrella-shaped, and the globular ovary is covered with a dense layer of hairs. Fruits have 3-4 chambers, each bearing 2 seeds. The flower is yellowish in colour, globular, densely short-hairy, and about 3-4cm long. The short-hairy calyx is formed by 4 free sepals, while 4 petals are twice as long as the calyx and short-hairy on the outer surface (FIPI, 1996).

Fruit and Seed Description: The fruit is a short-hairy capsule that opens along 3 valves. Each cell includes 1 seed (FIPI, 1996).

Seed Collection: Seeds are usually collected from the tree or from the ground after shaking the branches. In seed-source areas, the ground is usually cleared and sometimes burnt to prepare for seed collection. To ease collection, a cover can be spread out on the ground. The optimal time of collection is reached when the fruits have changed in colour from green to brownish. Maturity can be confirmed by a cutting test.

Uses: The timber is used in house-building, coffins, agricultural and sporting implements, furniture, and as aquilaria wood (FIPI, 1996). The oil is used in traditional medicine as a diuretic and cardiotonic, and is also burned in Buddhist temples (Dy Phon, 2000).

Current Status: Because the wood of *marah-prao* has a high value and is in high demand, this species is over-exploited and in danger of extinction if adequate protection measures are not implemented. It now requires adequate protection measures and conservation interventions. The distribution of this species is now scattered, and its habitats have been

destroyed by forestland conversions and selective illegal logging. The number of mature trees are now few, and this results in difficulties in obtaining seed collections.

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

References:

- Cambodian Forestry Law No. 35, 25th June 1988
- FA, 2002 (draft), List of Trade Names of Commercial Wood in Cambodia, Trade Names of Commercial Wood
- Dy Phon, 2000, Dictionary of Plants used in Cambodia
- 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, 12th September.
- CTSP Seminar, 29 Jan. 2002 on Forest Gene Conservation Strategy

