

# SEED LEAFLET

No. 26 September 2000



## *Dalbergia cochinchinensis* Pierre

### Taxonomy and nomenclature

**Family:** Fabaceae (Papilionoideae)

#### Synonyms:

**Vernacular/common names:** Payoong (Thailand); trac (Vietnam); mai ka young (Laos); Thailand rosewood, Siamese rosewood (trade names).

### Distribution and habitat

Native to Indo-China and adjacent countries, approximately between 22°N and 10°N. The natural habitat is lowland forests with uniform rainfall, 1200-1650 mm rain per year, mean annual temperature 20-32°C and absolute minimum temperature of 10°C. It is light demanding, drought tolerant and with no special demands to soil conditions. Growth rate is rather slow.

### Uses

Mainly grown for the attractive wood. Sapwood is grey, heartwood red or almost black with fine texture, very hard and durable. The bad stem form and a tendency to produce buttresses is a problem and further research on improvement and management is needed. It is a nitrogen fixing species, suitable in agroforestry and for soil improvement.



Foliage and fruits. Ill.: Somyos Kijkar.

### Botanical description

Medium to large evergreen tree, 25-30 m tall and 60 (-120) cm in diameter. The leaves are compound, with 7-9 leaflets. Flowers white, in axillary panicles.

### Fruit and seed description

**Fruit:** indehiscent, flat pod, 5-6 cm long, 1 cm wide; there are 1-3 seeds per pod.

**Seed:** flat, brown. There are about 35,000 seeds/kg.

### Flowering and fruiting habit

In Vietnam it flowers May-July and fruits in September-November. In Laos seed matures in the beginning of the dry season in Dec-Jan but can be collected in Sep-Oct during the rainy season.

### Harvest

The seed is mature when the pod has changed colour to dark brown. In Laos the pods are often collected as soon as the colour turns from green to yellow to minimise insect predation.

Collection from tarpaulins on the ground after shaking or cutting branches.

### Processing and handling

After collection the pods are dried in the sun for about three days. The dry pods remain closed and must be cut in pieces containing one seed each. A seed thresher could probably extract the seeds effectively but care should be taken not to damage the seeds.

### Storage and viability

The seeds are orthodox and store well in a dry place.

### Dormancy and pretreatment

Pretreatment by immersion in boiling water and left to cool in the water.

### Sowing and germination

Vegetative propagation by air layering, cuttings and grafting. Stands can be established by natural regeneration or using planting stock.



Plantation, north-eastern Thailand. Photo: Somyos Kijkar.

### **Selected readings**

**Nguyen, N.C. et al. 1996.** *Vietnam Forest Trees*. Forest Inventory and Planning Institute. Hanoi. **Soerianegara I, Lemmens, R.H.M.J., eds., 1993.** *Plant Resources of South-East Asia No. 5(1). Timber trees: major commercial timbers*. Wageningen, Netherlands: Pudoc Scientific Publishers. Also published by Prosea Foundation, Bogor, Indonesia.

THIS NOTE WAS PREPARED IN COLLABORATION  
WITH THE INDOCHINA TREE SEED PROGRAMME

Author: Dorte Jøker, DFSC

Danida Forest Seed Centre	Phone: +45-49190500
Krogerupvej 21	Fax: +45-49160258
DK-3050 Humlebaek	Email: <a href="mailto:dfsc@sns.dk">dfsc@sns.dk</a>
Denmark	Website: <a href="http://www.dfsc.dk">www.dfsc.dk</a>

---