Derris elliptica

**LOCAL NAMES**
Burmese (hon); English (tuba root, derris); Fijian (nduva, duva ni vavalagi); Filipino (tugling-pula (Tagalog)); French (touba); German (Tubawurzel); Indonesian (oyod tungkul (Javanese)); Malay (akar tuba); Thai (lai nam (northern)); Vietnamese (đáay thu [øo][s]c [øa])

**BOTANIC DESCRIPTION**
Derris elliptica is a liana up to 16 m long, root reddish-brown, apical shoots often leafless for several meter and rusty pubescent.

Leaflets 7-15, mostly densely rusty hairy on both surfaces when young.

Inflorescences axillary or fascicled on older branches; flowers with rusty pubescent calyx and pinkish corolla, standard with basal callosities, rusty silky hairy.

Fruit oblong or oblong-elliptical, with a narrow wing along both sides.

**BIOLOGY**
D. elliptica may start flowering at 18 months of age. Wild plants flower and fruit normally. Pods ripen about 4 months after fertilization. In cultivation fruiting is rare.
**Derris elliptica**

**Fabaceae - Papilionoidea**

**ECOLOGY**
D. elliptica is commonly found in forest edges, roadsides and along rivers, in Java up to 1500 m altitude. D. elliptica may occur as weeds in forest plantations of Acacia, Eucalyptus and Swietenia. D. elliptica can survive dry periods of up to 4 months. This species is often confined to low altitudes.

**BIOPHYSICAL LIMITS**
Altitude: Up to 1500 m.

**DOCUMENTED SPECIES DISTRIBUTION**

| Native: Bangladesh, Indonesia, Malaysia, Myanmar, Thailand |
| Exotic: India, Papua New Guinea, Philippines |

The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.
Derris elliptica
(Wallich) Benth.
Fabaceae - Papilionoideae

PRODUCTS
Poison: D. elliptica is used as a fish poison throughout southern Asia and the Pacific. The pounded root is considered the strongest fish poison in South-East Asia. Rotenone is used in fisheries in the Philippines, Bangladesh and India to remove predatory and other undesired fish from rearing pods. An extract from the roots of D. elliptica is reported to be employed as an ingredient of arrow poison in Borneo. The powdered root of D. elliptica is widely used as an insecticide.

Medicine: D. elliptica is traditionally used for antisepsis and applied to abscesses and against leprosy and itch, and sometimes as an abortifacient. In Thailand, the roots are also used as emmenagogue and the stems as a blood tonic.

SERVICES
**Derris elliptica**
(Wallich) Benth.
Fabaceae - Papilionioidae

**TREE MANAGEMENT**
The yield of dried D. elliptica roots is 1100-1800 kg/ha, occasionally up to 3000 kg/ha, particularly when plants are trellised.

**GERmplasm MANAGEMENT**

**PESTS AND DISEASES**
Diseases: Some fungal diseases are reported to damage planted D. elliptica: a rust (Ustilago derrides), a Gloeosporium sp. That causes the shoots tips to die, and an unidentified fungal disease that attacks cuttings in nursery beds.

Pests: Pests are not serious and are easily controlled.
**Derris elliptica**

*(Wallich) Benth.*

**Fabaceae - Papilionoideae**

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**FURTHER READING**


**SUGGESTED CITATION**