

## **Wrightia tinctoria**

(Roxb.) R. Br.

Apocynaceae

indrajou, indrajau

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### LOCAL NAMES

Bengali (kurchi tita-indarjau,dhudi); English (ivory tree,easter tree,pala indigo); Hindi (dhudi,hat,kura,kurchi,kureya,karva-indarjau); Tamil (vepali); Trade name (indrajou,indrajau); Vietnamese (thu'ng mu'c,thu'ng mu'c nhuôm)

### BOTANIC DESCRIPTION

*Wrightia tinctoria* is a small to medium-size deciduous tree, to 18 m tall and to 20 cm dbh with green marks on the stem and producing milky-white resin. The bark is smooth, somewhat corky and pale grey.

Leaves large up to 10 cm long by 5 cm wide, simple, opposite, decussate and glabrous (sometimes puberulous beneath). Young leaves are bluish with reddish nerves.

Flowers white, fragrant, 1-5 cm long, arranged in lax dichasial cymes (5 cm long).

Fruit a green follicle, 0.5 cm in diameter by up to 50 cm long, pendulous pairs and coherent only at the tip.

Seed linear, pointed at the ends, 1.2-1.8 mm long, light yellowish-grey, crowned with a tuft of white silky hairs.

### BIOLOGY

Leaf shedding is in winter and new leaves appear in spring. In India, the flowering occurs from April to June while peak fruiting is in August. Seeds are wind-dispersed.

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### ECOLOGY

It is suitable for arid, semi-arid and moist regions with a wide range of soil types, especially dry sandy sites or hillsides and valleys. It tolerates moderate shading and is often found as undergrowth in deciduous forests.

### BIOPHYSICAL LIMITS

Altitude: 0-1200 m

Mean annual rainfall: 400-2500 mm

Mean temperature range: 17-25°C

Soil type: dry, sandy, gravelly or rocky soils and also tolerates high uranium levels in soils.

### DOCUMENTED SPECIES DISTRIBUTION

Native: Australia, India, Myanmar, Nepal, Vietnam

Exotic:



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.

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### **PRODUCTS**

**Food:** The flowers, leaves, fruits and seeds may be eaten as vegetables after a thorough washing

**Timber:** The timber is high in quality, valuable, small, and white. The white wood, which is very fine, is used for turnery, carving, toy making, matchboxes, small boxes and furniture.

**Dye:** The leaves, flowers, fruits and roots is a sources of indigo-yielding glucoside, which produces a blue dye or indigo-like dye.

**Medicine:** The juice from fresh unripe fruits is used for coagulating milk. The seeds are said to be aphrodisiac and anthelmintic. The leaves are used to relieve toothache when chewed with salt. In Nepal, the milky juice is used to stop bleeding. Also the leaves and roots are pounded in water for treatment of fever. The seeds yield deep red, semi-drying oil, which has medicinal value. In Indian traditional medicine, the bark and leaves are used to treat psoriasis, stomach pains, toothache, and dysentery.

**Fodder:** The leaves are lopped for livestock fodder.

**Other products:** The pods contain floss, which is used for stuffing cushions. The cream-coloured latex has a rubber content varying from 2 to 28% that can be exploited commercially.

### **SERVICES**

**Soil improver:** The branches are trampled into the puddle soil in rice field for green manuring.

**Intercropping:** It's a good agroforestry species as it intercrop well.

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### **TREE MANAGEMENT**

W. tinctoria coppices well and also produces root suckers. It's slow to moderate growing. The saplings start to flower and fruit when they are 5-8 years old. The planted seedling should be protected from livestock browsing

The tree is sensitive to frost and is damaged by drought. It shows tolerance to high uranium levels in soils in India.

### **GERMPLASM MANAGEMENT**

There are about 60000 seed/Kg.

### **PESTS AND DISEASES**

In India, some moderate diseases caused by *Sarcinella apocynacearum* and *Cercospora wrightia*, which causes leaf spot disease in the nursery is reported.

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### **FURTHER READNG**

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### **SUGGESTED CITATION**

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