### LOCAL NAMES

English (yellow jacaranda,tipu tree,rosewood,racehorse tree,pride of Bolivia); Spanish (tipa blanca,tipa,palo mortero); Swahili (mtipia)

#### **BOTANIC DESCRIPTION**

Tipuana tipu is a large, spreading semi-deciduous tree to 20 m, but occasionally to 30 m, with a light spreading crown and spreading branches. Bark red-brown; trunk fissured and flaking with age, bark on the branches grey and cracked, sap from the cut branches red and sticky.

Leaves pinnate, alternate, petiolate, with pulvinus base; leaflets light green, each narrowly oblong to oblong elliptic, 4-5 cm long; margin entire, tip rounded, often notched, on a short stalk.

Flowers many, in long, loose sprays, each with wavy yellow-orange petals. They appear in showy terminal and axillary racemes or panicles; calyx small, bell-shaped, 5-pointed; corolla papilionaceous, about 2 cm long.

Fruit usual for the Fabaceae family. The only genus in the family with single-seeded, flat-winged fruit, yellow-green at first, looking like blossoms, later grey-brown, fibrous; indehiscent, winged pod (samara) staying on the tree for a long time.

The generic name 'tipuana' is derived from the vernacular name 'tipu'.



Flowers (Ibisch P.)



The branchlets and flowers of this agroforestry species. (Ibisch P.)



Cattle grazing Tipuana tipu in southeast Queensland (Gutteridge R.C.)

### **ECOLOGY**

T. tipu is drought resistant and prefers sunny locations.

BIOPHYSICAL LIMITS Altitude: 1 200-2 200 m

Mean annual rainfall: 350-1 500 mm Mean annual temperature: 20-33 deg.C

Soil type: Trees tolerate a wide variety of soils, including black cotton, but prefer medium clay-loam.

# DOCUMENTED SPECIES DISTRIBUTION

Native: Bolivia, Brazil

Exotic: Australia, Kenya, Tanzania, Uganda, US



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.

# **PRODUCTS**

Apiculture: Trees provide forage for bees.

Fuel: T. tipu is a source of firewood and is used in the production of charcoal.

Timber: The tree yields good timber (a variety of rosewood) and is used to make poles.

# **SERVICES**

Shade or shelter: Used for shade near patios and as a lawn or street tree because of its thick growing habit and spreading shape; it also acts as a windbreak.

Nitrogen fixing: T. tipu fixes atmospheric nitrogen.

Soil improver: Dead flowers produce some litter, which improves soil texture and nutrient content.

Ornamental: The attractive tree is suitable for planting in amenity areas.

# TREE MANAGEMENT

T. tipu is a fast growing species that responds well to pollarding, coppicing and lopping. Trees are shallow rooted therefore should not be planted close to buildings as they are likely to be blown over by wind. They should be transplanted from their containers in cool weather, and the young plants should be staked and watered until roots are established. Planting in highly alkaline soil should be avoided. Occasional pruning and deep waterings is recommended, once the hardy plants are established.

### **GERMPLASM MANAGEMENT**

Seed storage behaviour is orthodox, and seeds can be stored for up to 3 months at room temperature. There are 1 600-5 000 seeds/kg.

#### **FURTHER READNG**

CABI. 2000. Global Forestry Compendium. CD-ROM. CABI

El Hadidi MN, Boulos L. 1988. The trees of Egypt. The American University in Cairo Press. 113, Sharia Kasr el Aini.

Hong TD, Linington S, Ellis RH. 1996. Seed storage behaviour: a compendium. Handbooks for Genebanks: No. 4. IPGRI.

ICRAF. 1992. A selection of useful trees and shrubs for Kenya: Notes on their identification, propagation and management for use by farming and pastoral communities. ICRAF.

Katende AB et al. 1995. Useful trees and shrubs for Uganda. Identification, Propagation and Management for Agricultural and Pastoral Communities. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).

Mbuya LP et al. 1994. Useful trees and shrubs for Tanzania: Identification, Propagation and Management for Agricultural and Pastoral Communities. Regional Soil Conservation Unit (RSCU), Swedish International Development Authority (SIDA).

Noad T, Birnie A. 1989. Trees of Kenya. General Printers, Nairobi.

# SUGGESTED CITATION

Orwa C, Mutua A, Kindt R, Jamnadass R, Simons A. 2009. Agroforestree Database:a tree reference and selection guide version 4.0 (http://www.worldagroforestry.org/af/treedb/)