

LOCAL NAMES

Afrikaans (dopperkiaat); English (round-leaved teak, round-leaved kiaat); Zulu (indlandlovu)

BOTANIC DESCRIPTION

Pterocarpus rotundifolius is a multi-stemmed deciduous tree up to 20 m in height. Crown open and roundish, branching from reasonably low down. Bark brownish-grey.

Leaves compound, leaflets 1-3 pairs and a terminal leaflet, glossy, pale green. Nerves conspicuously parallel. Glabrous above and puberulous below. Leaf stalk 3-5 cm long and covered with velvety hairs.

Flowers fragrant, abundant, in terminal inflorescences, 15 cm long; petals yellow, crinkly.

Fruit a reddish brown indehiscent pod.

Pterocarpus is based on the Greek words 'pteran' meaning a wing and, 'karpos' meaning fruit. The specific epithet "rotundifolius" describes its round or circular leaflets.

BIOLOGY

P. rotundifolius is hermaphroditic. Flowering is influenced by rain and is sometimes noted in very young plants.

ECOLOGY

P. rotundifolius is commonly found in open woodland and wooded grassland, sometimes on rocky hillsides. More common on sandy soils but also on loamy and clay soils. The tree withstands drought and some cold but mainly prefers frost free areas.

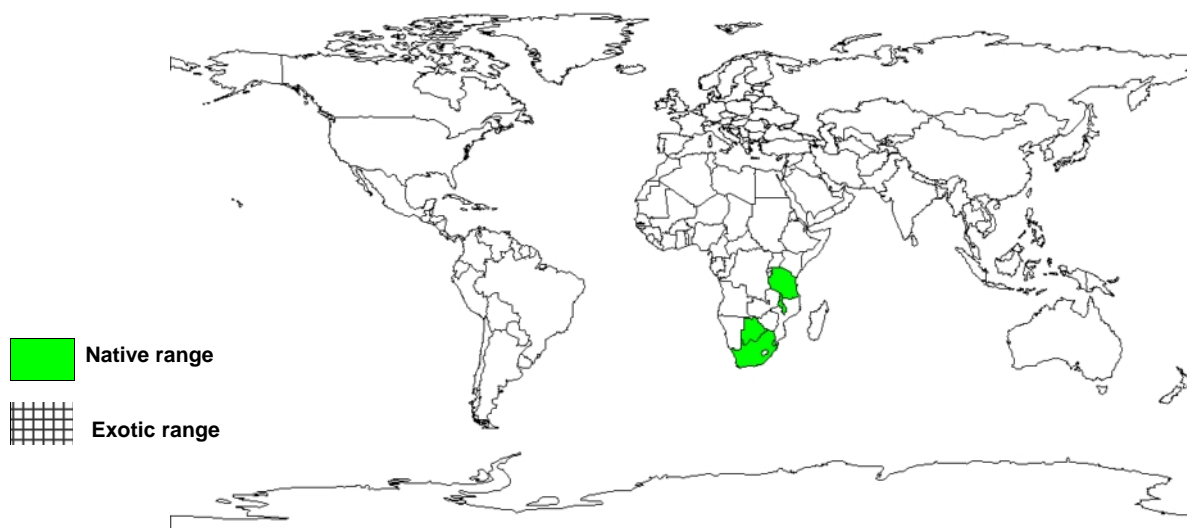
BIOPHYSICAL LIMITS

Soil type: Common on light/sandy soils.

DOCUMENTED SPECIES DISTRIBUTION

Native: Botswana, Malawi, South Africa, Swaziland, Tanzania

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.

PRODUCTS

Fodder: Foliage browsed by cattle and game.

Apiculture: *P. rotundifolius* is a rich pollen and nectar source strongly preferred by bee farmers.

Timber: Heart and sapwood indistinguishable, yellow with pale brown markings, moderately heavy (air-dry 848 kg/m³). The wood is used as a general purpose timber on the farm. Large pieces can be used for shelving, kitchen furniture and picture frames.

Medicine: Leaf infusion dropped into sore eyes.

SERVICES

Erosion control: *P. rotundifolius* is an important soil conserver with a non-aggressive root system.

Shade or shelter: Provides shelter for animals and nesting sites for birds.

Nitrogen fixing: Nodulation and nitrogen fixing activity are confirmed in *Pterocarpus rotundifolius*.

Ornamental: *P. rotundifolius* is a very worthwhile subject for gardens because of its profuse flowering.

TREE MANAGEMENT

P. rotundifolius grows relatively fast, up to 1 m/year. Young plants should be protected against cold winds for the first two years and from browsing animals, overgrazing causes coppicing.

GERMPLASM MANAGEMENT

Soaking seeds overnight in water enhances germination.

PESTS AND DISEASES

Larvae of the bushveld butterfly, *Charaxes achaemenes* *achaemenes*, defoliate *P. rotundifolius*.

FURTHER READNG

Hogberg P. 1986. Nitrogen-fixation and nutrient relations in savanna woodland trees (Tanzania). *Journal of Applied Ecology*. 23(2): 675-688.

Venter F, Venter J-A. 1996. Making the most of Indigenous trees. Briza Publications.

SUGGESTED CITATION

Orwa C, A Mutua, Kindt R , Jamnadass R, S Anthony. 2009 *Agroforestry Database:a tree reference and selection guide* version 4.0 (<http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp>)