

LOCAL NAMES

Afrikaans (dopperkiaat,huilboom,huilbos); Bemba (mwikalankanga); English (African wattle,Rhodesian black wattle,African false wattle,weeping wattle); Lozi (mushande,mulungwa); Luganda (mwezenyele); Lunda (mwezenyele); Ndebele (umsehla); Nyanja (mteta,mnyeale); Shona (muzeze); Tongan (muzenzenze,munyeele); Tswana (mosêltha); Zulu (isiKhaba-mkhombe,umSehle,umThobo)

BOTANIC DESCRIPTION

Peltophorum africanum is a small to medium-size tree, 5-10 m tall, with a spreading crown, frequently branched from near the ground or 2- to 3-stemmed from ground level; bark smooth and grey on the young branches; twigs covered in reddish-brown hairs, but brown to grey and rough with lengthwise grooves on older branches and stems.

Leaves alternate, compound, bipinnate, with 4-7 pairs of pinnae, each bearing 10-12 (or up to 23) pairs of feathery leaflets; leaflets oblong, averaging 7 x 2 mm but variable in size, dull green top side, pale green underside; apex rounded with a fine, hairlike tip; base asymmetric; margin entire; petiole and rachis covered with dense, rusty brown, velvety hairs; stipule distinctive in appearance, like small compound leaves, but falling early; when not in flower *P. africanum* can easily be confused with an acacia tree, except that it is completely without thorns.

Flowers very showy, bright yellow, in dense axillary sprays up to 15 cm long; all floral parts in 5s; flower stalks and the backs of sepals covered with brown, velvety hairs; petals about 2 cm in diameter, bright yellow and crinkled.

Fruit a flat pod, elliptic, tapering to apex and base, up to 10 x 2 cm with a winglike margin, very thinly woody, almost leathery, greyish-brown or yellow-tan and ripening to a dark brown, hanging in dense clusters, indehiscent.

The generic name is derived from the Greek meaning 'shield-bearing' and refers to the shape of the stigma; 'africanum' simply means from Africa.

BIOLOGY

The flowers are a source of pollen for bees.



Showy bright yellow flowers of *Peltophorum africanum*. Occur in dense axillary sprays, up to 150mm long. Petals bright yellow, crinkled, about 20mm in diameter. Flower stalks and backs of sepals covered with brown velvety hairs. (Jooste M)



A beautiful, deciduous, thornless tree of dry bush and open savanna - often in sandy soil. Frequently branched from near the ground or 2 to 3 stemmed. (Ellis RP)



Rough brown bark, longitudinally furrowed. (Ellis RP)

ECOLOGY

A fast-growing, frost- and drought-resistant tree commonly occurring at medium to low altitudes, in wooded grassland and along marginal valleys. It is resistant to a fair amount of drought.

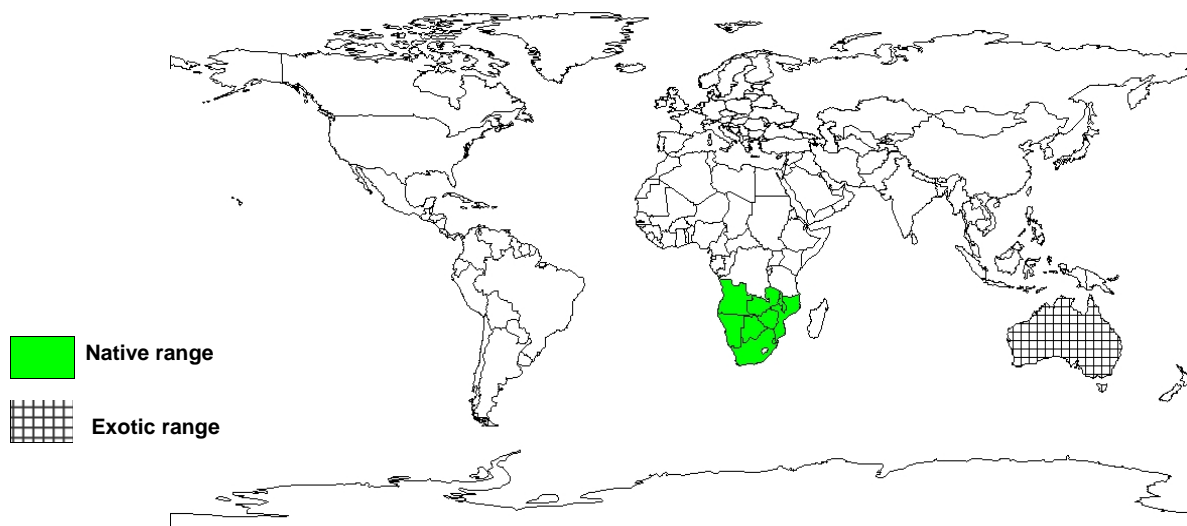
BIOPHYSICAL LIMITS

Soil type: Grows mostly on well-drained soils. Sandy loam, medium loam, clay loam and sandy soils are all suitable.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Botswana, Democratic Republic of Congo, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, Zimbabwe

Exotic: Australia



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: Young leaves, and especially the pods, are relished by cattle and goats. A valuable tree to have in the veld on cattle and game farms, for the leaves and twigs are eaten by elephant, black rhino, giraffe, kudu, impala and grey duiker.

Apiculture: An important tree for beekeepers, as it is a good source of nectar and pollen.

Fuel: *P. africanum* is a relatively good source of fuelwood.

Timber: The sapwood is attractive and has a wavy grain of light-brown colour interspersed with light pink; pitting adds to the grain character. The proportion of heartwood is very small; it is reddish, close grained, of medium weight, fairly hard and tough, and is almost termite proof if well seasoned. It takes a good polish and works easily. Although its size limits its use, *P. africanum* has good-quality timber. It is used mainly to produce tool handles, carvings and similar small items but is sometimes used for furniture and wagons.

Poison: The gum is reputed to be poisonous.

Medicine: The bark and roots are commonly used in traditional medicine. Bark is chewed to relieve colic; an infusion, sometimes with leaves, is taken orally to relieve a variety of stomach disorders such as diarrhoea and dysentery and to get rid of intestinal parasites. Steam from a hot bark decoction is applied to sore eyes and, in serious cases, it is dropped into the eyes. The powdered decorticated root is applied to wounds to hasten healing, and a decoction is taken by mouth or gargled to treat sores in the throat. The roots are also boiled in water and used as an enema. Leaves are boiled and the steam directed into the mouth to relieve toothache. The Zulu of South Africa use the tree as part of a mixture to cure infertility.

SERVICES

Shade or shelter: *P. africanum* can be successfully planted along fences to give shade protection to smaller stock and game during the hot summer months.

Ornamental: An excellent garden shade tree, beautiful in flower. It is said to have all the requirements of a perfect avenue tree. Popular as a bonsai subject.

TREE MANAGEMENT

P. africanum is a fairly fast-growing tree, achieving 1-1.5 m/year; will withstand some frost but needs protection for the 1st 2-3 years. When grown as a bonsai tree, an adult shape and a thick corky bark form in 2-4 years, with the leaves much reduced. The root system is not aggressive.

GERMPLASM MANAGEMENT

Seed storage behaviour is orthodox; viability has been maintained following 3 years hermetic storage at room temperature with 13 + or -2% mc; approximately 1200-3300 seeds/kg.

PESTS AND DISEASES

The tree is often inhabited by communal caterpillars that produce large masses of silky grey threads, and in some areas is infested by frog-hoppers, whose copious watery secretions cause it to be called a 'rain tree'. The larvae of Van Son's charaxes (*Charaxes vansoni*), Satyr charaxes (*C. ethalion*) and Braine's charaxes (*C. brainei*) feed on the leaves.

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SUGGESTED CITATION

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