

Phytolacca dioica

umbú, packalacca, ombú

LOCAL NAMES

English (phytolacca); Spanish (belombra,bella sombra); Trade name (umbú,packalacca,ombú)

BOTANIC DESCRIPTION

Phytolacca dioica is a spreading deciduous tree, 6-10 m in height, with a domed crown. Trunk erect, stout, uniquely swollen at the base, which may grow to 4 m in diameter, spreading above the ground so that the tree appears to be standing on a mound. Bark grey to pale brown, rough; becomes gnarled with age; young branches fleshy green. The trunk and branches contain up to 80% of water.

Leaves simple alternate, typical of the family, appearing as terminal whorls; each smooth, oval, somewhat recurved, to 15 cm in length, margin edge appearing white, midrib extending to form a distinct tip; young leaves fresh light-green, leaf stalks and midribs tinged with red.

Flowers small, creamy white, with many stamens arising from 5 green sepals hanging in handsome terminal catkins up to 15 cm in length; in flower the tree is striking.

Fruits juicy, yellow to black berries with 10 lobes hanging in clusters; irregularly produced after flowering, each 3-7 mm; small, shiny, grey-black seeds are found inside the soft fruits.

The genus Phytolacca comprises plants from which juice is extracted for dyeing, a fact reflected in the generic name meaning 'plant that produces juice', from the Greek 'phyton' (plant) and 'lacca', a latinized form of the Amerindian word 'laek' (shellac), from the colouring property of the fruit. The generic epithet 'dioica' alludes to the fact male and female flowers occur on separate trees in this species.

BIOLOGY

Male and female flowers occur on separate trees.

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Phytolaccaceae



Flowers are borne on terminal, more or less pendulous sprays about 10cm long. The flowers are unisexual and male and female flowers are borne on separate trees. Leaves occur alternately on different sides of the branchlets and have long pinkish petioles. (Ellis RP)



A striking medium sized to large, semi-evergreen tree 12-20m tall. It has a short, thick bole and a massively branched, rounded crown. Native to South America (Argentina, Uruguay, Paraguay, Brazil and Peru). Widely cultivated in South Africa for fodder and shade, wherever frost is not too severe. (Ellis RP)



Succulent, berry-like fruits, measuring about 100mm in diameter, consist of a number of carpels joined at the base. These fruits ripen to a blackish colour early in winter and are eagerly eaten by stock. (Ellis RP)

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Phytolaccaceae

ECOLOGY

P. dioica is a tree for mild climates, undemanding in soil fertility and resistant to sea winds. The tree is reputed to grow rapidly to its preferred height but is fairly aggressive in gardens, with root suckers appearing readily above the soil. It is resistant to locusts and ants and will withstand hurricanes and prolonged heat and drought.

DOCUMENTED SPECIES DISTRIBUTION

Native: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Surinam, United States of America, Uruguay, Venezuela

Exotic: Australia, India, Kenya, South Africa, United Kingdom



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

Fodder: Leaves are used as fodder in times of drought. However, fruits should be considered potentially toxic to livestock.

Poison: The seeds, leaf and root contain saponins.

Medicine: The fruit has been used as a human emetic and purgative; an infusion of the leaves also acts as a purgative.

Other products: The fruit contains a soapy juice composed of salts of lime and potash.

SERVICES

Shade or shelter: *P. dioica* provides excellent shade in regions where other trees will not grow.

Ornamental: Planted as an unusual ornamental around Nairobi and elsewhere in the highlands of Kenya.

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TREE MANAGEMENT

The tree can be pruned to form a perfectly domed crown suitable for shade.

GERMPLASM MANAGEMENT

The species may show orthodox seed storage behaviour. There are approximately 150 000 seeds/kg.

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Phytolaccaceae

FURTHER READING

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SUGGESTED CITATION

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