

Utilisation

Human consumption

Fresh or dried leaves can be used in various dishes or tea to add an agreeable aroma and peppery taste.

Medicine

The inner bark is used as a treatment for malaria, colds, chest complaints, coughs, diarrhoea, muscle pains, stomach-ache and general body pains. Dried and ground into a snuff, pepper-bark tree is used to clear the sinuses; and it is chewed or smoked (the burning bark is inhaled) as a remedy for chest complaints. The stem and root bark act as an expectorant; the leaves are used as part of an infusion to treat rheumatism. Dried bark is commonly chewed and the juice swallowed as a remedy for stomach-ache, constipation, toothache, cough, fever, muscle pains, weak joints and general body pains. Fresh roots are boiled and mixed with soup for the prevention of diarrhoea. Leaf decoction baths are used as a cure for several skin diseases. The bark, roots or leaves can be boiled in water and the decoction taken to treat malaria.

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Scientific name: *Warburgia salutaris*

Common names: Pepper-bark tree (English),
Peperbasboom (Afrikaans), Isib-
haha (isiZulu), Mulanga, Manaka
(Tshivenda), Shibaga (Xitsonga),
Molaka (Sepedi)



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Background

Pepper-bark tree is a tropical forest tree of the Canellaceae family of plants. The species name *salutaris* in Latin means “healthful”. The English common name pepper-bark is derived from the inner bark that is physically powerful. It originates in eastern and southern Africa, mainly in South Africa, Swaziland, Malawi, Mozambique and Zimbabwe. All parts of the tree are highly aromatic with a peppery smell and taste. The pepper-bark tree is growing in evergreen forest or woodland on hill and mountain slopes and in wooded ravines in north-eastern KwaZulu-Natal and eastern and northern Limpopo (Soutpansberg mountains) and Mpumalanga in South Africa.

Description

Pepper-bark tree is an evergreen aromatic tree, usually 5 to 10 m in height, but it can reach up to 20 m in height with a dense, erect canopy. The tree is a very slow-growing one and takes upwards of 20 years to become mature.



Stem

The main stem is short, and the bark is shiny and brown with rough, longitudinal marks, becoming cracked and darker brown with age.

Leaves

The long and narrow leaves (11 cm long x 3 cm wide) are deep green in colour above and paler below.

Flowers

It has a small white to greenish flowers of up to 7 mm in diameter. Flowering time is from April to May.

Bark

The bark is smooth and grey on young branches but brown and slightly rough with prominent yellowish corky lenticels on older branches and stems; inner bark is reddish, with a peppery smell.

Fruit

The fruit is oval berries, 4 cm in diameter, turning dark purple when ripe during spring to December and black when mature. Fruiting is from October to January.

Climatic requirements

It prefers a moderate climate. It thrives under hot humid conditions. This tree is sensitive to frost.

Soil requirements

Pepper-bark tree grow in most soil types but it prefers a sandy well-drained soil, with good aeration. The soil should be rich in organic matter in the form of well-rotted compost.

Production practices

Propagation

Pepper-bark tree is propagated from seed (direct sowing and seedlings), vegetatively from cuttings

(root, stem and tissue) and wildlings. An easier and successful method is to grow it from root suckers or from stem and tip cuttings. The best time to obtain cutting is from late spring to midsummer. An apical shoot tip cutting of 15 cm should be cut early in the morning and kept in a bucket of water until ready to stick into a sandy medium.

Planting

The best time for cultivating pepper-bark tree is in winter months (June-July). The trees can be spaced 2 m apart in the row with 4 m between rows at a depth of 1 m. The cuttings should be 100 mm long and the leaves must be removed, leaving only the top two to three. The bottom part of the cutting should be dipped into a root-stimulating hormone powder, placed in river sand and kept moist.

Fertilisation

The soil should be rich in organic matter in the form of well-rotted compost.

Pests

Fruit flies and monkeys are drawn to the fruit and harvesting of the seed is difficult. The fruit fly larval infestations of fruit result in damage to the developing seed, reducing its viability. Control is achieved with bait sprays of protein hydrolysate mixed with trichlorfon or mercaptothion.

Harvesting maturity

It can commence once the trees reach a height of 1 m. The trees can be harvested when they are at least 10 years old. Seeds ripen between October and December.

Harvesting method

The trees can be cut mechanically, using the wood. The bark is harvested with an axe or bush knife or it can be peeled from the tree into small pieces, leaving some bark on the wood.