

USES

The tree, fruit, seed, leaves and roots are used specifically for human consumption, for medicinal purposes, fuel and industrial uses.

HUMAN CONSUMPTION

The fruit can be eaten raw but is best when slightly overripe. More typically, it is put into cold water to soak, and then the skin and seed are removed by pressing. The remaining pulp is mixed with ground tubers to create porridge. Alternatively, the fruit can be processed into a storable jam, desserts and jellies.

INDUSTRIAL

Oil can be extracted from the seeds and is used to soften leather and for oiling bowstrings, or alternatively as fuel for lamp

FIREWOOD

Typically, the wood of the tree can be used as firewood. However, it can also be used to make handles for tools, utensils, or for construction purposes.

MEDICINAL

All parts of the tree and its fruit are used in cultural remedies. The roots are used to treat abscesses, stomach aches, colic, malaria, coughs and bilharzia. The powdered roots can also allegedly be added to beer to act as an aphrodisiac. The tree's bark is used as a remedy for syphilis, hookworm, chest pains and body aches. The oil can be used for wounds as an ointment or cosmetically for the hair or skin to soothe chafing. The leaves can be used to soothe inflamed eyes and tonsillitis.

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Sour Plum



agriculture,
forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA



Family: Olacaceae

Scientific name: *Ximenia caffra*

Common names: Grootsoorpruim; umThunduluka-obomvu; Morokologa; Itsengeni; Motshidi; Pepo; Mutanzwa; Amanumbilo; large sourplum

ORIGIN AND DISTRIBUTION

The sour plum is native throughout tropical regions in South East Africa, mainly Kenya, Malawi, Mozambique, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. *Ximenia* is named after a Spanish monk; Francisco Ximenez, who wrote about the plants of Mexico in the 17th century. The genus *Ximenia* also occurs in America. The species name *caffra* refers to Kaffraria, an old name for a part of the Eastern Cape (SA).

PRODUCTION AREAS IN SOUTH AFRICA

The sour plum can be located from Tanzania to KwaZulu-Natal. In the wild, it is found in woodlands, grasslands, rocky outcrops and sometimes termite mounds. In South Africa, the two varieties have a different distribution pattern with var. *caffra* occurring in the northern and central regions of Limpopo and var. *natalensis* further east and south in Mpumalanga, Limpopo and KwaZulu-Natal.

DESCRIPTION OF THE PLANT

Ximenia caffra is a deciduous tree, up to 6 m tall with an untidy, open crown. The bark is dark grey and rough, but pale green or brown on younger branches. Branchlets are spine tipped. Sapwood is white and heartwood is hard and reddish brown. The root system is non-aggressive.

LEAVES

The leaves are simple (60 x 25 mm) alternate, and elliptic in shape. They are leathery, dark green and often occur in clusters (fascicles) on short-spur branchlets. *Ximenia caffra* var. *caffra* has dense, reddish hairs on the leaves and branchlets.

STEM

The wood of the tree is hard and fine grained.

FLOWERS

The flowers are small, sweet scented and creamy green during flowering, although they have been seen to be tinged pink or sometimes red. Generally, flowering takes place in August to October in single-stem clusters in the axils of the spines or on the dwarf branchlets.

FRUIT

After flowering follows thin-fleshed, attractive fruit which are glossy deep red with white spots, 3,5 cm in length and 2,5 cm in diameter. The skin is smooth, initially green and then ripens to an orange or red. Similarly, the flesh is also orange or red in colour, and when ripe has a juicy pulp. The tree produces several fruit that are ellipsoidal (oval to round) in shape and generally have a refreshing, sour taste.



SEED

The single large seed is smooth, ellipsoid and yellow-brown to red in colour. The seed is hard and about 2,5 cm in length and contains *Ximenia* oil.

Climate and soil requirements

TEMPERATURE

Ximenia caffra can withstand moderate frost; it is drought resistant and needs full sun.

RAINFALL

The sour plum can tolerate altitudes of up to 2 000 m and requires an annual rainfall of 250 to 1 270 mm.

SOIL

It generally requires clay or loam soils for effective growth.

Cultural practices

PROPAGATION

Ximenia caffra is grown from seed.

PLANTING

The tree is easily cultivated from fresh seed with a mixture of river sand and compost (5:1). The seeds germinate after 14 to 30 days and transplanting should take place when the seedlings reach the two-leaf stage. This plant is semi-parasitic, and will grow better once established in the soil where it can make contact with other plant roots. The growth rate is moderate, up to 0,5 m a year.

PESTS AND DISEASES

The larvae of various butterflies, including the Natal bar, silvery bar, Bowker's sapphire, saffron sapphire, brown playboy and bush scarlet butterfly feed on the leaves.