Olacaceae

LOCAL NAMES

Afrikaans (Suurpruim); English (large sour plum); Swahili (mtundakula,mpingi); Zulu (umThunduluka-obomvu,amatu nduluka)

BOTANIC DESCRIPTION

Ximenia caffra is a sparsely branched shrub or small tree to 6 m tall with a shapeless, untidy crown. Branches and twigs are armed with stout axillary spines and are glabrous or dense tomentose. Bark is grayish-brown to black, longitudinally fissured bark, red slash and rough on older, larger species.

Leaves simple, alternate, elliptic to lanceolate, 2.5-9 cm long by 1.2-5 cm wide, leathery, blue-green, often fascicled on dwarf, lateral shoots, margin entire, apex rounded or notched, base broadly tapering to rounded, often hairy when young and turning to shiny green when getting older and petiole about 8 mm long.

Flowers greenish to creamy white, sometimes tinged pink to red, up to 12mm long, small and in clusters or fascicled, in the axils of spines or on dwarf lateral shoots, sometimes pink to red bearded around the throat of the corolla; pedicels 3-6 cm long.

Fruit ellipsoidal or ovoid drupe, about 3.5 cm long and 2.5 cm in diameter, greenish when young, orange to red flesh when ripe with juicy pulps and a smooth skin.

Seed 1, smooth, ellipsoid, yellowish-brown to red, up to 2.5 cm long, 1 cm thick, hard coated.

There are two varieties which can be distinguished by the degree of hairiness of the leaves. These are var. caffra (the leaves remain velvety of hairy to maturity) and var. natalensis Sond. (the leaves are without hairs even when young).

BIOLOGY

Flowering in September to October during the dry season towards the onset of the rains. Fruiting in December to January during the rains in southern Africa. In Tanzania, the flowering is sproradic where in January, May, July and October while fruiting is in October and January.

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ECOLOGY

The tree is common in dry wooded bushland and wooded grassland especially on rocky hillsides and termite mounds, but is more abundant in coastal and lowland dry woodland. The common associate tree species are Acacia tortilis, Afzelia quanzensis, Brachystegia spiciformis, Grewia bicolor, Maytenus senegalensis, Terminalia sericea, among others.

BIOPHYSICAL LIMITS Altitude: 0-2 000 m

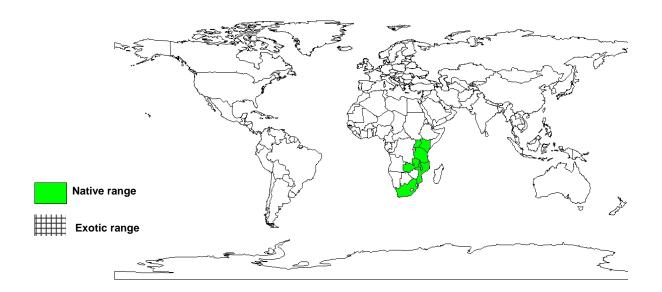
Mean annual rainfall: 250-1 270 mm Mean annual temperature: 14-30 deg.C

Soil type: Occurs on clay loams, clays, compacted loamy sand, sandy clay loams, and friable clays with laterite horizon.

DOCUMENTED SPECIES DISTRIBUTION

Native: Kenya, Malawi, Mozambique, South Africa, Tanzania, Uganda, Zambia

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.

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PRODUCTS

Food: The fruits are eaten raw, though bitter or sour, but refreshing and has an almond-like scent. Alternatively the fruits are put into cold water and the skin and kernel are removed by pressing them out and the resulting porridge is mixed with pounded tubers, which is then eaten. The fruits are also suitable for preparing jam.

Fuel: It is used as firewood.

Oil: The roasted seeds are mashed in the mortar yielding a viscous, non-drying oil is applied to colour the hair to dark black and helps to straighten it. Oil from the seeds (Ximenia oil) is also used to soften leather, bowstrings, cosmetic products locally and for a general body ointment.

Timber: Wood is hard and fine-grained. It is used to make tool handles, spoons and in general construction.

Medical use: The roots are used to treat abscess, severe stomachaches or colic, and against malaria, cough and bilharzia. The tree is also used as a remedy for syphilis, hookworm, chest pains and generalized body pain. The roots are pounded and boiled with maize flour for porridge, which is eaten to prevent sterility in women. The roasted and pounded seeds are used for wounds

SERVICES

Ornamental: X. caffra is used as ornamental and live fence

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TREE MANAGEMENT

Ximenia caffra has good seed germination capacity and profuse natural regeneration, but saplings may succumb to prolonged drought or forest fires. Partial protection of natural woodland could help promote regeneration.

GERMPLASM MANAGEMENT

Seed storage behaviour is recalcitrant. There are 700-1200 seeds per kg.

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SUGGESTED CITATION

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