

Fact Sheet: XIMENIA

Ximenia americana

Common Names

Oshiwambo:	Eembeke / Eemheke
Kwangali:	Kakukuru
Silozi:	Mungomba
Otjiherero:	Omumbeke
!Kung:	G//oe
English:	Large sour plum
German:	Große Wildpflaume
Afrikaans:	Geelpruim / Kleinsuurpruim



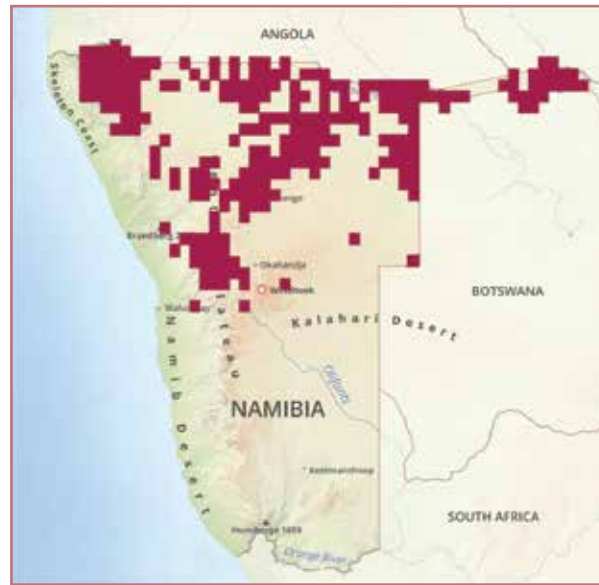
Introduction

A bush-forming shrub or small tree 2-7 m high with straight thorns. Leaves are semi-succulent with both surfaces blue-green with a dull waxy coating. The fragrant white, yellow-green or pink flowers occur in branched inflorescences. Fruits are ovoid stone-fruit that are yellowish or orange when ripe. Fruit contain a juicy pulp and one seed kernel. The seed is woody with a fatty kernel and a brittle shell (Orwa, et al., 2009). Another *Ximenia* species occurs in Namibia, *X. caffra*, of which the fruit are sweet compared to the inedible fruit of *X. americana*. *X. americana* has two varieties in Namibia. Phenotypical variations in the fruit and oil compositions are observed across species and varieties as well as regions.

Traditional use

X. americana has a long tradition of use in Northern Namibia. Roots, bark and leaves are used in traditional remedies. The seeds are roasted, crushed and boiled to extract the seed oil which is used as an emollient and for hair care (Mallet & den Adel-Sheehama, 2014). The fruit are unsuitable for human consumption but can be eaten by goats which may contribute to the propagation of the plant.

Status IUCN: least concern



Habitat description

(◀ Irish, 2018)

A mostly solitary tree dispersed in open country, dry acacia woodland, wooded grassland and scrub, savannah, gallery forest, along coastal areas, in the understorey of dry forests, in dry woodlands or on riverbanks (NBRI, 2014).

Abundance and sustainable use

Although the distribution pattern of *Ximenia* is patchy, high densities of shrubs above 40 per ha (up to 140 per ha) have been counted in localised pockets that form the main harvesting areas. Harvesters' estimates of the age of some of the larger trees ranged between 40 and 70 years, and young trees start producing a substantial fruit harvest after 4-10 years.

In the longer term, propagation of *Ximenia* trees has the potential to increase harvesting volumes and reduce the present harvesting effort of collecting *Ximenia* fruits from distant trees that need to be visited regularly throughout the fruiting season (NBRI, 2014).



Harvesting and Processing

The Tulongeni Twahangana Cooperative (TTC) was founded in 2012 in north central Namibia and has since developed a supply chain in collaboration with CRIAA SA-DC to produce virgin oils (Bennett, 2012). TTC has become one of the leading suppliers of sustainably produced, quality controlled and traceable Ximenia in Namibia and the southern Africa region (NBRI, 2014) (Samwel, 2018). Extended research has led to the development of sophisticated oil processing methods to accommodate the unique properties of Ximenia seed oil (Mallet & den Adel-Sheehama, 2014).



▲ *Ximenia seed*



▲ *Ximenia kernels*

Ximenia oil is available as virgin oil (cold-pressed and decanted and/or filtered) as well as in a purified (light refining) market-ready quality.

INCI: XIMENIA AMERICANA SEED OIL

*Seed intake at ►
Tulongeni Twahangana Cooperative*



Composition and use

Ximenia seed oil is very stable as it contains around 80% mono-unsaturated fatty acids. It contains for vegetable oil unusually high proportion of long-chain fatty acids such as Ximeninic, Ximenic and nervonic acid with proven bioactive properties which makes it a unique oil (MNS Bulletin, 2009).

In cosmetics it is used for restoring the integrity of the cell wall and for restructuring properties (anti-ageing). It is also has anti-inflammatory properties and can improve the functioning of the sebaceous tissues for the use in hair growth products (NBRI, 2014).



▲ *Purified and Virgin Ximenia oil.*

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