

Fact Sheet: MARULA

Sclerocarya birrea

Common Names

Oshiwambo:	Omugongo / Omwoongo Malula
Silozi:	
Kavango,	
Tswana:	Uwongo
San:	Kaqe
German:	Marulabaum
Afrikaans:	Maroela

Introduction



▲ Photo: Gondwana Collection

A large deciduous and dioecious tree with a dense spreading crown. The female tree bears up to 500 kg of fruit per year. The almost round golf ball sized fruit contain a green to yellow scented fruit pulp which surrounds a pip containing two to three fruit kernels (Curtis & Mannheimer, 2005).

Traditional knowledge

In north-central Namibia Marula has a most important traditional, social, economic and nutritional significance. Until today the Marula season remains a time of festivities (Mallet & den Adel-Sheehama, 2014). Marula supports a wide range of industries and services based on a rich cultural knowledge. The kernel oil, locally known as 'Ondjove', as a delicacy condiment food oil has particular value in cooking, skin and hair care and as a special gift (Botelle, 2001).



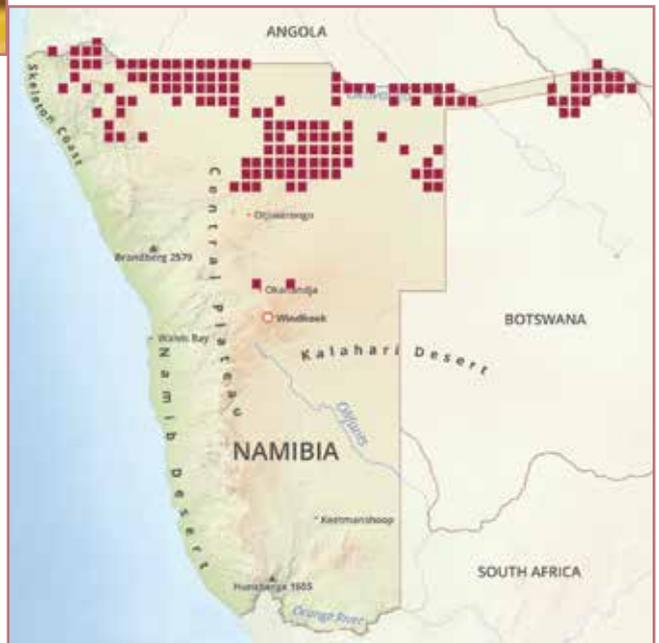
◀ Marula fruit (Photo: NBRI)

Status Namibia: protected

Oshituthi shomagongo, Marula Fruit Festival - Inscribed in 2015 on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity.

Distribution

▼ (Irish, 2018)



Marula commonly occurs on sandy and clay soils, but has been recorded on gravel or stony soil, with a preference for well-drained soil. It occurs mostly in the north-central regions of Namibia where its occurrence is strongly correlated with human settlements. Marula trees occur mostly in the higher-lying areas of the Cuvelai system where the soils are fertile and the floodwaters of the Oshanas do not reach (den Adel, 2011).



◀ Decortication of Marula kernels
Photo: CRIAA SA-DC

Harvesting and sustainable use

Traditional law and customs around harvesting have evolved from the long history of Marula use in northern Namibia. Homesteads are often found close to Marula trees and many trees are tenured to individual households. It is also mostly the women of the family who tend to the Marula trees and are involved in the trade of the products derived from them (MCA Namibia, 2012).

In the late 1990s a supply chain and processing plant were initiated utilising fruit harvested in North-central Namibia. Today the Eudafano Women Co-operative is one of the key role players in the Namibian supply chain of Marula. The Marula resource base is stable and various role-players have initiated its improvement through seedling protection and grafting techniques (Mallet & den Adel-Sheehama, 2014). Marula has been one of the first African natural ingredients for which access and benefit sharing agreements between the traditional knowledge holders, who are also the primary producers, and the oil processors have been reached (Ngithila, et al., 2010).



▲ Photo: D. Honsbein

Production

Marula fruit are processed to separate the fruit juice, pulp and skins from the pips. The pips are left to dry before the kernels are decorticated. Oil is then extracted from the kernels. The oil extraction process typically uses cold pressing and filtration. The oil is clear and of light yellow/golden colour. Further processing of the crude oil to reach standards for use as cosmetic ingredient is undertaken by European companies (MCA Namibia, 2012).



▲ Uwanawa range Photo: CRIAA SA-DC

Composition and use

The oil, which is extracted from the kernels, is composed of a large proportion of the mono-unsaturated fatty acid oleic acid (70-78%) and natural antioxidants. It also contains the saturated acids palmitic (9-12%), stearic and palmitoleic acids as well as polyunsaturated acids Omega 6-linoleic acid and (4-7%) Omega 9-oleic acid.

Marula oil contains a similar fatty acid composition to olive oil, however, it is 10 times more stable to oxidation. The exceptional chemical stability of marula oil is due to its natural antioxidant composition of tocopherol, phenolic compounds and flavonoids, which makes it an excellent ingredient for cosmetic products. It has a non-greasy texture and also non-comedogenic



properties (MCA Namibia, 2012). Marula kernel oil is easily absorbed by the skin and improves skin hydration, smoothness and reduces redness (Mallet & den Adel-Sheehama, 2014).

CAS 68956-68-3 (generic number for all vegetable oils)

HS Vegetable oil: 151590

INCI SCLEROCARYA BIRREA Seed Oil

Namib Desert Jojoba CC: EU CPNP; NOP; EOS

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