

# Fact Sheet: KALAHARI MELON

*Citrullus lanatus*

## Common Names

- Oshindonga:** Oontanga & Etanga  
Iyomungongo
- Oshikwanyama:** Eenhanga & Etanga  
Iomungongo
- Kwangali:** Matanga
- German:** Wassermelone, Tsamma
- Afrikaans:** Waatlemoen, Tsamma
- Otjiherero:** Etanga
- San:** //Khontsamab, Tamah

## Introduction



▲ Photo: PROTA

Annual herb with prostrate or climbing stems up to 10 m long with large lobed leaves covered in hair. The small yellow flowers are unisexual but occurring on the same plant. The fruit are smooth and up to 20 cm long, greenish with darker mottling (Maggs-Koelling, 2000).

## Traditional knowledge and used plant parts

A long history of traditional use of *C. lanatus* as food and source of cosmetic oil exists in the northern regions of Namibia. Melon seeds are stored for times of famine as energy and protein source (Schall, 2003). The seed oil is used widely as skin conditioner and message oil and to

a lesser extent as food and medicinal oil. Traditional seed oil extraction methods are based on roasting and boiling the seeds which gives a strong flavour to the oil. The oil cake is used as food supplement or animal feed (Carr & Mallet, 2008).



## Habitat and Distribution

*C. lanatus* occurs widely in Namibia. The Kalahari is considered the centre of diversity for this species which is also the progenitor of modern sweet watermelon varieties (Maggs, 1998).

◀ (Irish, 2018).

## Cultivation

*C. lanatus* is produced as a secondary crop in staple food crop plantings such as pearl millet in the north-central regions of Namibia. The crop is managed minimally and is entirely dependent on rainfall (Carr & Mallet, 2008). A large variety of landraces is maintained among producers for different uses of the melons and seeds (Maggs-Koelling, 2000).

## Harvesting and Processing

The melons are harvested when the plant leaves die off and are then left in protected places until the harvest of the main crop is completed.



Seeds are extracted at the processing site from the wet melons by pounding and washing (Carr & Mallet, 2008).

*Kalahari Melon Seeds extracted and dried.* ▶



*KMS pre-cleaning machine designed by CRIAA SA-DC and manufactured at Katurura Artisans Project in Windhoek.* ▶



The Eudafano Women Co-operative Ltd in northern Namibia is the largest processing plant for KMS in southern Africa (Kangandjo, 2016). A traceability system for the seeds, harvested and delivered mostly by women, has been established. Unlike the traditional extraction method, the commercial seed oils are cold-extracted mechanically. Production standards to facilitate export of the valuable virgin oils have been developed.

## Composition and use

Kalahari melon seed oils are composed chiefly of unsaturated fatty acids such as oleic and linoleic acid, along with saturated fatty acids like palmitic and stearic acid. The abundance of saturated fatty acids and u-6 polyunsaturated fatty acids meets cosmetic and therapeutic oil needs.



▶ *Cold-pressed KMS oil*

## Documentation available

MSDS: Eudafano Women Co-operative Ltd

Cosmetics Products Notification EU: Namib Desert Oils

INCI: CITRULLUS LANATUS SEED OIL

Namib Desert Jojoba CC: EU CPNP; NOP; EOS

## REFERENCES

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