

# Fact Sheet: !NARA

*Acanthosicyos horridus*

## Common Names

<b>Nama, Damara,</b>	!nara
<b>Topnaar:</b>	Omungaraha
<b>Otiherero:</b>	Narras
<b>English:</b>	Nara
<b>German:</b>	Botterpitte
<b>Afrikaans:</b>	

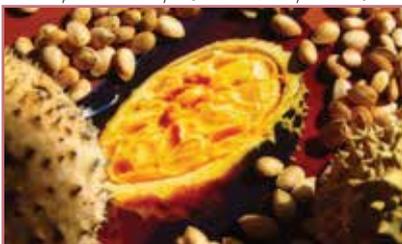
## Introduction



A perennial, dioecious, strongly branched bush up to 1 m tall and 15–40 m in diameter, with a very long woody taproot. Leaves are reduced to minute scales to reduce moisture loss in the desert climate. Plants form a hammock which accumulates sand. The pale yellow or pale green flowers are unisexual. The fruit are round and melon-like, pale-green and spiky. The seeds are large and white to creamy with buttery kernels (Maggs-Kölling, Iileka, Gottlieb, & Uushona, 2014).

## Parts used

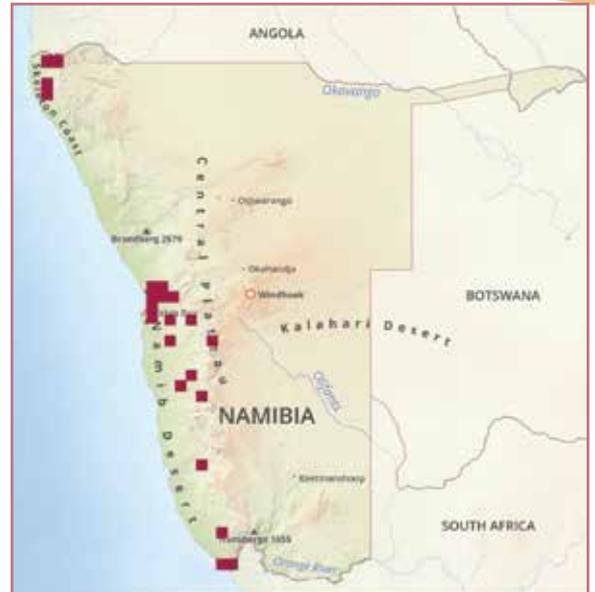
The seeds are extracted and can be eaten. Virgin oils are extracted from the seed. Traditionally the fruit pulp and seeds are processed into a variety of products (Maggs-Kölling, Iileka, Gottlieb, & Uushona, 2014).



## Status Namibia: protected, endemic

## Distribution and Habitat

!Nara is endemic to the Namib Desert and occurs mostly in the Kuiseb River Delta (Maggs-Kölling, Iileka, Gottlieb, & Uushona, 2014). It is able to survive in the hyper-arid desert climate because of its woody taproot that grows deep into the sand allowing it to reach subterranean water. It can survive in years without any rainfall and in some areas it is the only plant species found. The dense lattice-like growth of older stems serves to catch and bind windblown sand, acting as a dune stabiliser. The age of mature fruiting !nara plants may exceed 100 years (Wilkins-Ellert, 2004).

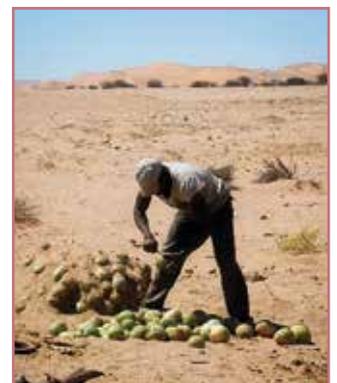


(Irish, 2019)

## Traditional knowledge and harvesting

!Nara fruit have been collected from wild plant populations as long as the Namib Desert exists. Attempts to domesticate !nara have been unsuccessful for reasons relating to its very specific habitat requirements. Historically families of the Topnaar people of the Lower Kuiseb Valley owned and utilised

!Nara bushes allocated by the communities (Dentlinger, 1977). Currently the !Nara fields have largely been commercialised and are communal property (Maggs-Kölling, Iileka, Gottlieb, & Uushona, 2014). Numerous products are made by the Topnaar people from all parts of the melons in an age-old tradition passed on from generation to generation and considerable potential exists in the larger scale utilization of this very localised resource.



## Composition and use

!Nara Oil is extremely high in unsaturated fatty acids (23% = mono-unsaturated, 57% di-unsaturated and 0.1% poly-unsaturated) and therefore very beneficial for dry and irritated skin conditions. The oil is well absorbed and has shown very positive effects on sensitive skin conditions (Desert Hills). !Nara Oil is a 100% pure cold-pressed virgin oil, without any additives produced by Desert Hills.

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## Documentation available

MSDS & CPNP for !Nara Namibia natural cosmetics

CPNP for Namib Desert Oils

INCI: ACANTHOSICYOS HORRIDUS (!NARA) SEED OIL



## Potential for development

The seed oil has a very high component of unsaturated fatty acids which makes it suitable for use on irritated and dry skin conditions.

The ripe fruits are aromatic and the pulp is rich in sugars. The fruit pulp and plant sap contain a non-volatile enzyme which curdles milk (Wilkins-Ellert, 2004).

Green unripe fruits contain varying amounts of highly oxygenated tetracyclic triterpenoids, called cucurbitacins. Cucurbitacins B and D have been identified as the primary source of bitterness, together with traces of cucurbitacins G and H. As the fruits ripen they rapidly lose their bitterness



under the influence of the enzyme elaterase.

The starches are of an unusually small size, which renders them suitable in the production of biodegradable plastics. (Wilkins-Ellert, 2004)

## REFERENCES

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