# PLANT USES BY THE TOPNAAR OF THE SESFONTEIN AREA (NAMIB DESERT)

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#### 1. Introduction

In a previous article (P. Van Damme et al., 1992, this volume) the plant use by the Kuiseb Topnaar was presented and discussed.

From December 1991 to June 1992, an ethnobotanical survey was conducted in collaboration with the Topnaar. All Topnaar settlements of the Sesfontein area were visited and all families interviewed. Special emphasis was placed on the older Topnaar, whose plant knowledge is the most extensive. For each plant mentioned, information on its use, the used parts and the preparation and processing method was collected. The plant specimens that could be collected in the field were identified by the authors. Because of extreme drought during this period, some plants could not be found in the field. Some of these could still be identified through literature research, relating them to the vernacular names and the plant descriptions given by the Topnaar. Others however remain unidentified to date.

Some people gave information on the use of non-plant material. This information is also included in this article.

As this article will show, esfontein Topnaar use some of the plants that the Kuiseb Topnaar use but also refer to plants that are specific to their area.

The most important influence for differences between the plant uses in the Kuiseb area and in Sesfontein is the fact that the Sesfontein climate is more humid than the climate in the Namib. The result is a more abundant vegetation in Sesfontein. Therefore the variety of useful plants is more extended.

Although most Topnaar in Sesfontein have a garden, where they grow wheat and corn, many wild food plants are still gathered from the environment. Different wild seeds are used for the preparation of porridge. Edible tubers and bulbs are collected and many wild fruits are available.

Although there is a hospital in the village, medicinal plants remain widely used.

Wood for building purposes and fuel is obtained from the environment.

Other plant uses are similar to the uses practiced by the Kuiseb Topnaar.

### 2. Plant Uses

The plants catalogued below are arranged by family in alphabetic order. Following the scientific plant name, the herbarium specimen, collected by the author, is mentioned (VdE is the abbreviation of Van den Eynden). All specimens are deposited at the National Herbarium of Namibia and duplicates are deposited at the herbarium of the DERUN. If existing, a Nama name is given, as well as the common names in English (E) and/or Afrikaans (A) as have been found in the literature. Each plant is briefly described. All plant uses by the Topnaar are mentioned as well as uses in other areas or by other people, as found in the literature (all consulted books and articles are mentioned in the literature list).

#### 2.1 Nonvascular Plants

#### Alariaceae

Ecklonia maxima (OSBECK) PAPENFUSS

Nama huri || hâb, huri || hāb, || gam || gûib

The description of this marine plant is given by Van Damme, et al. (1992).

The hollow stem is roasted and ground. The powder thus obtained (mixed with vaseline) is rubbed on wounds and burns. This treatment prevents infection and accelerates healing.

#### Lichenes

Parmelia hottentotta (THUNB.) ACH.

Nama |ui|| khaob

The description of this lichen is given by Van Damme, et al. (1992).

The lichen is ground into a powder which is used as a deodorant and perfume.

#### 2.2 Vascular Plants

#### Acanthaceae

Monechma sp. Hochst [VdE 23.6.e]

Nama blomhain

This shrub was only found in the vegetative stage on gravel plains near Sesfontein. Identification of the species was therefore impossible. Oblong leaves covered with cystolithes grow in clusters. The flowers are bilaterally symmetric.

A decoction of the roots is drunk to relieve general body pains.

Ruellia diversifolia S. Moore  $[VdE\ 21.6.o]$ 

Nama Igomigommehaib

Named after J. Ruel (1479-1537), personal physician of King François I of France and an author of several botanical works, this herb is found on the banks of the Kuiseb river and on rocky soils near Sesfontein. The oval grey-green leaves are glandular and feel very sticky.

Nectar can be sucked out of its beautiful red flowers. The 5 spathulate sepals are unequal in length, thus explaining the specific name dwersyfotum (Lat.). The linear, ribbed fruits contain many seeds.

#### **Amaranthaceae**

Amaranthus dinteri Schinz ssp. dinteri [VdE 18.6.b, VdE 4.4.k]

Nama ≠khaubeb

Common name pigweed (E)

The generic name is derived from the Greek word amarantos meaning unwiltable and refers to the plant's flowers. Dinter is derived from K. Dinter, the first botanist of imperial South West Africa (now Namibia) who published a book on the country's vegetable "veldkos" in 1912. This low annual herb with very small, inversed, egg-shaped leaves of about 1 cm length grows in humid areas (e.g. along the springs in Sesfontein). Sometimes a dark red spot is found in the centre of the leaves. The flowers are inconspicuous.

The leaves and stems are cooked and eaten as vegetables. They can be fried with onions.



Figure 1: Ruellia diversifolia

# **Arecaceae** Palm family

#### Hyphaene petersiana KLOTZSCH

Nama !unib

<u>Common names</u> makalani palm, ivory palm, dum palm, real fan palm (E),

opregte waaierpalm (A)

The makalani palm was introduced in Namibia by the Germans. Several

trees grow in the gardens in Sesfontein. The trunk of this palm is swollen in the middle and the tree can grow higher than 20 m. The palmately compound leaves, which have 40-60 leaflets of 1.5-2 m long, grow in a fan-shape. The inflorescence is surrounded by a, up to 2 m long, spathe. Small male and larger female flowers grow on separate trees. The fruit is a spherical, dark brown drupe, 5-7 cm in diameter, with a fibrous mesocarp and ivory-like central endosperm. The generic name is derived from the Greek word hyphaino, to entwine, referring to the fibrous fruits.

The sweet fibrous mesocarp is eaten. The leaves are used to cover roofs. The leaves are divided into thin strips and used for weaving all kind of baskets.

In northern Namibia, Zimbabwe and Zambia this palm is extensively used. Palm wine is made from sap tapped from the trunk. The heart of the palm was in the past eaten as a vegetable. This is now forbidden as the tree is killed by harvesting its heart. The ivory-part of the seed can be carved into buttons and ornaments. Rope can be made from the leaf fibres by soaking them in mud and twisting them.

#### Phoenix dactylifera L.

Nama

Common names dadel (A), date palm (E)

Many date palms were planted in the gardens of Sesfontein by the Germans.

The Topnaar eat the dates fresh or dried.

A description of this tree, as well as its uses by people other than the Topnaar, is given by Van Damme, et al. (1992).

### Asclepiadaceae

Milkweed family

#### Fockea angustifolia K. Schum

Common name water root kambroo (E)

Slender, twining, hairy stems arise from a large tuber. As the specific name indicates, angustus (Lat.) meaning slender and folium (Lat.) leaf, this

perennial herb has slender leaves positioned opposite each other and covered with hairs. The small, creamy flowers, growing in axillary clusters, develop into brown mottled follicles.

The tubers, which have a high water content, are eaten roasted.

Hoodia currori (HOOKER) DECNE

Nama !khowab. !khobab

This succulent is described by Van Damme, et al. (1992).

The stems are eaten raw after the removal of the outer skin and thorns. This is not only a foodstuff but is also eaten as a cough remedy. Because of its bitterness it is at the same time thirst quenching.

Orthanthera albida Schinz [VdE 3.4.a]

Nama | arib

This plant is described by Van Damme, et al. (1992).

Children enjoy eating the fruits (follicles) of this herb. Young fruits are eaten completely, but in the case of older fruits only the inner part of the peel is eaten (the outer part and the seeds are thrown away).

Pergularia daemia (FORSK.) CHIOV. var. daemia [VdE 14.2.d, VdE 6.2.e]

Nama !gubib, !guwib, dai!gubib, |gutama || ōb

This plant, described by Van Damme, et al. (1992), grows in the Sesfontein valley as a creeper.

In cases of backache, incisions are made in the back and the ground root of this plant is introduced into these incisions.

Uses other than those in Sesfontein are also given by Van Damme, et al. (1992).

Pergularia daemia (Forsk.) Chiov. var. leiocarpa (K. Schum.) H. Huber  $[VdE\ 11.5.f]$ 

Nama !gubib, !guwib, dai-!gubib, |gutama || ob

This plant, described by Van Damme, et al. (1992), is used in the same way as Pergularia daemia var. daemia.

#### Asteraceae

Daisy family

Antiphiona fragrans (MERXM.) MERXM. [VdE 23.6.1]

Nama doeba!oahe

Fragrans, from the Latin verb fragrare, to smell, alludes to the fact that the dried, ground leaves of this shrub can be used as a body powder.

The shrub is glandular and grows in the mountains around Sesfontein. The alternate leaves are bipinnately parted and its yellow-purple flowerheads are homogamous.

A decoction of the whole plant is drunk to relieve chest pains.

Helichrysum tomentosulum (Klatt) Merxm. ssp. aromaticum (Dinter) Merxm.

Nama !urueb

The generic name of *Helichrysum* refers to the golden-yellow flowers (helios (Gk.) sun and chrusos (Gk.) gold), arranged in cylindrical homogamous flowerheads, which are surrounded by white-reddish bracts. The whole plant is covered with felty, woolly hairs (tomentum (Lat.) is translated as felty). The leaves are linear, 10-50 mm long and 2-10 mm wide.

The dried, ground flowerheads are used as a perfume, hence the name aromaticum.

#### Bignoniaceae

Jacaranda family

Catophractes alexandri D.Don [VdE 24.6.h]

Nama !gawas, !gabas

<u>Common names</u> swartdoring, skaapbos (A)

Sir J.E. Alexander was in 1836 the first person to collect this tree, during his journey to Walvisbay. This 2 m high shrub is covered with dense, white, felty hairs. Some branches end in a spine. The small, inversed egg-shaped leaves (1-3 by 0.4-1 cm) have serrated margins. White, about 10 cm long, flowers develop into woody elliptic fruits of 4-8 cm long and 2 cm wide, with a warty surface. The fruits contain flat winged seeds with a tuft of long hair.

This shrub grows in the mountains around Sesfontein.

A decoction of branch or root bark is drunk or bark itself is chewed to cure colds.

The Bergdamara chew the roots to relieve stomach pains.

#### Boraginaceae

Heliotrope family, Forget-me-not family

Cordia gharaf (FORSK.) EHRENB EX ASCHERSON [VdE 20.6.a]

Nama | aes. || khōs

The genus *cordia* is named after V. Cordus (1515-1544), author of some botanical publications. This shrub or small tree has elliptical leaves of 3-10 by 1.5-5 cm, covered with very short rough hairs. The tubular, white-pink flowers grow in terminal cymes.

The orange elliptic, about 1 cm long fruits are eaten fresh. This tree is found in riverbeds near Sesfontein.

The plant is used as a protection against rabies by the Ovambo. It is not mentioned however which part of the plant they use. In Tanzania, the leaves and bark are used as a remedy for leprosy. The Masai chew the root as an abortifacient and wash inflamed eyes of cattle with a decoction of root and bark.

#### Burseraceae

Myrrh family

Commiphora giessii V.D. WALT [VdE 23.6.c]

Nama 1aoab

The name Commiphora is derived from kommi (Gk.), meaning sticky gum, as some Commiphora spp. of Arabia and Somalia yield a precious resinous gum. This specific Commiphora is named after W. Giess, former director of the Namibian National Herbarium. It is a slender shrub of about 2 m high, with a gold-brown, non-flaking bark and slender flexible branches, which is found in the hills around Sesfontein. The tree has trifoliate leaves. The inconspicuous unisexual flowers, growing on different trees, develop into spherical to ellipsoid leathery drupes, which open with 2 valves when ripe.

The twigs are used as fire-sticks.

#### Commiphora kraeuseliana HEINE

Nama Jana

This up to 2 m high *commiptora* has a thick, swollen trunk with a papery flaking bark. The shrub is found in the hills around Sesfontein. The compound, clustered leaves have 6-8 pairs of very small leaflets (12-20 by 0.5 mm). The inconspicuous flowers, growing in clusters, are hairy and develop into fleshy drupes which open with 2 valves when ripe. The specific name goes back to the paleobotanist R. Kräusel (1890-1966), who visited South West Africa in 1953 and wrote several papers on fossil plants of this area.

A decoction of the bark or branches is drunk to cure heart problems, palpitations, chest pains, coughs and colds. Washing oneself with water in which twigs of this shrub were soaked is believed to bring luck.

#### Caesalpiniaceae

Cassia family

Caesalpinia rubra (ENGLER) BRENAN [VdE 23.6.k]

Nama auauroi

Caesalpinia is named after A. Cesalpini (1519-1603) of Pisa, an academic of medicine and botany and the personal physician of Pope Clemens VIII. This reddish-brown shrub, to which rubra refers, from the Latin meaning red, can attain a height of 3 m and is very fragrant. Its twigs bear bipinnate leaves, composed of 5-12 pairs of pinnae, and up to 18 pairs of small reddish leaflets supported by thorny stipules. The red flowers are arranged in terminal racemes up to 20 cm long. The fruits are reddish-brown, teardrop-shaped, beaked, flat pods covered with a few thorns and 2-seeded. This shrub grows in the mountains near Sesfontein.

The dried, ground leaves are used as a perfume.

Colophospermum mopane (Kirk ex Benth.) Kirk ex Leonard

[VdE 21.6.m]

Nama tsaurahais

Common names mopane, ironwood (E), mopani (A)

The mopane forms the main vegetation of the Kaokoveld savannah and is common around Sesfontein and along some rivers in the northern Namib. It is not found in the Central or Southern Namib. Its specific name is the vernacular name which the local tribes give to this tree. The tree or bush may be up to 10 m high. The leaves are composed of 2 sickle-shaped glandular leaflets, 5 to 12 cm long. These two leaves together are heart-shaped. The greenish-yellow flowers are arranged in racemes. The leathery, yellow-brownish, kidney-shaped pods are flat, 3-5 by 2-3 cm, single seeded and indehiscent. The name *Colophospermum* means oily seed in Greek.

All parts of this tree are widely used in Sesfontein. The wood is used for carving, also for the construction of houses, kraals, fences, sheds, etc. as well as for fuelwood. A decoction of the leaves is drunk to relieve stomach pains. The body can also be washed with this decoction or the decoction drunk to cure colds. In cases of headache/eyepains, the head/eyes are washed with a decoction of the leaves and thereafter the boiled leaves are put on the head/eyes. Twigs are chewed to clean the teeth. Often aphids parasite the mopane leaves and thus produce secretions. These dried secretions, which contain sugar and gum, are collected and eaten.

The mopane plays a very important role in the culture of the tribes of northern Namibia (Ovambo and Himba). Only medicinal uses however are listed here. Chewed leaves are placed on wounds to stop bleeding. The leaves are thought to have antiseptic properties as well. A resinous gum is exuded from the branches when they are heated. This gum is applied to infected wounds. A wood decoction is used in the Transvaal to treat syphilis and inflamed eyes. The Bushmen drink a bark decoction for diarrhoea.

# Capparaceae

Caper family

Boscia albitrunca (Burch.) Gilg & Benedict [VdE 20.6.d]

Nama Ihunib

 $\underline{\text{Common names}}$  witgat, witstamboom (A), caper bush, shepherd's tree (E)

The description of this tree is given by Van Damme, et al. (1992).

The berries, soaked in water, mixed, and their seeds removed by straining, give a fresh juice to drink.

Other uses are also given by Van Damme, et al. (1992).

Boscia foetida Schinz ssp. foetida [VdE 19.6.j, VdE 13.2.c]

Nama xaubelhunis

<u>Common names</u> stinkbush, smelly shepherd's tree (E), stinkdoorn, witgatboom (A)

The description of this tree is given by Van Damme, et al. (1992).

A decoction of the leaves and twigs is drunk as a cold and stomach pain remedy.

Further uses of this tree are mentioned by Van Damme, et al. (1992).

Maerua schinzii PAX [VdE 13.2.h, 14.2.a, 21.6.e]

Nama goradab, goardab

Common names kwarda, lammerdrol (A)

A description of this tree is given by Van Damme, et al. (1992).

The juice, or a decoction of the leaves is dripped into the ears to relieve earache. Drinking a leaf decoction cures coughs.

Other uses of this tree can be found by Van Damme, et al. (1992).

#### Combretaceae

Combretum family

Combretum imberbe WAWRA [VdE 24.6.c]

Nama !has

Common names leadwood (E), menshout, hardelkoolboom (A)

It is in the plains around Sesfontein, that this large, up to 20 m high tree, with rough grey-brown bark, is growing. The opposite, elliptical leaves are scaled on both sides. The greenish-yellow, tetramerous flowers, also scaled on the outside, develop into 4-winged, greenish-yellow pods of 1.5-2 cm in diameter, containing a single seed.

A decoction of the leaves is drunk to relieve chest pains.

The Ovambo drink a root extract mixed with water for stomachache. In Zimbabwe a root infusion is drunk to treat bilharziasis and diarrhoea. The smoke of burning leaves is inhaled to cure coughs and colds in South Africa. This tree also yields an edible gum.

Terminalia prunioides Lawson [VdE 23.6.a]

Nama ≠khēas

Common names sterkbos, hardekool, deurmekaar (A)

This up to 9 m high bush or tree has greyish, oval leaves of 2-5 by 1-2.5 cm, which have short hairs on both sides. These leaves, as well as the flowers grow at the end of the branches (terminus (Lat.), top, border). The red-brown fruits are 2-winged and flattened, about 3.5 by 6 cm. The specific name refers to the plum-red colour of the fruits (prunus (Lat.), plum).

The roots of this tree, found in the mountains of Sesfontein, are chewed or a decoction of them is drunk to cure colds. The leaves are added to tea to improve its flavour. The wood is used as a fuel.

The bark is chewed by the Himba for coughs, sore throat and stomach cramps. In Botswana a root decoction is drunk for constipation. The Damara drink this decoction as a cough remedy.

## Cucurbitaceae

Cucumber family

Coccinia sp. WIGHT & ARN.

N<u>ama</u> ∣*hâb* 

This perennial, herbaceous climber with simple tendrils, derives its name from the similarity of its berries' colour to the colour of the coccus, a louse from which a red pigment is obtained (cochenille). The leaves are pentagonal to 3-7-lobed. Yellow unisexual flowers, found on separate plants, develop into spherical to ellipsoid, up to 9 cm long, red fruits.

The tuberous rootstock is eaten roasted.

#### Cyperaceae

Sedge family

Cyperus marginatus Thunb. [VdE 19.6.c, VdE 23.3.e, VdE 8.2.f, VdE 12.5.e]

Nama Iharub

A description of this grassy herb is given by Van Damme, et al. (1992).

The stalks are used to thatch roofs.

Cyperus sp. (C. fulgens C.B. CLARKE OF C. usitatus BURCH.)

Nama !hanni

Common name uintjie (A)

This grassy herb has subterrestrial stolons, ending in bulbs of 8-25 mm in diameter. It can therefore only be *c. fulgens* or *c. usitatus*. The leaves are as long or longer then the 10-60 cm high stems. The flowers are arranged in several spikelets with winged axils.

The bulbs are eaten raw or boiled.

Cyperus rotundus L. [VdE 19.6.h]

Nama !haren. |arebes

Common names nut-grass (E), uintjie (A)

The dried, ground tubers of this 30 cm high herb are very fragrant and therefore used as a perfume. These small, nut-like tubers grow at the end of slender, woody rhizomes and are edible. The specific name refers to their sperical shape. The flowers are arranged in several spikelets.

These tubers are widely used in Africa and Asia as a stimulant, to relieve stomach pains, indigestion, to cure urinary problems, malaria, etc. and also as a perfume. In Mali they are eaten as an aphrodisiac. In Tanzania a cough remedy for children is made from them.

#### Ebenaceae

Ebony family

Euclea pseudebenus E. MEYER ex.A.DC. [VdE 17.1.b]

Nama tsabis, tsawis

<u>Common names</u> black ebony, Cape ebony, false ebony (E), swartebbe, basterebbehout (A)

A description and non-Topnaar uses are given by Van Damme, et al. (1992).

The wood of this tree is used by the Topnaar as a fuel, for the construction of houses and kraals and in the manufacture of utensils.

#### Euphorbiaceae

Spurge family

Ricinus communis L. [VdE 31.3.n, VdE 21.6.p]

Nama |khēras

Common names castor bean (E), kasterolieboom (A)

A description of this plant, growing near the Sesfontein springs, is given by Van Damme, et al. (1992).

In cases of mumps or toothache, the *Ricinus* seeds are ground, boiled and rubbed onto the swollen cheek. This is covered with a warmed *Ricinus* leaf and a compress. Instead of the seeds, a fat can be used.

Other uses can be found by Van Damme, et al. (1992).

#### Fabaceae

Pea family

Cullen obtusifolia (DC) STIRTON [VdE 15.2.f, 4.4.n, 7.2.h.]

Nama !honab

This herb is described by Van Damme, et al. (1992).

The sweet-smelling leaves or the whole plant can be added to tea for flavouring. This tea whets the appetite. Adding the root to milk gives it a good taste and curdles it into a kind of yoghurt.

Sesbania sphaerosperma Welw. [VdE 21.6.g]

Nama

This 3 m high shrub is found in the Sesfontein hills. It has even-pinnate

leaves of 10-30 cm long, composed of 10-40 pairs of leaflets. Small spines grow on the leaf axis. The yellow, papilionaceous flowers are purple marbled and grow in racemes eventually developing into characteristic long, straight pods of 13-25 by 0.5 cm. These pods are beaked at the end. They split open with 2 valves to release the many spherical orange seeds, which incidently explain the species name: *sphatro* and *sperma* meaning ball and seed respectively in Greek. The pod is divided by septae, growing 5 mm from each other.

The roasted, ground seeds can be used as a substitute for coffee.

#### Geraniaceae

Geranium family, ranesbill family

#### Monsonia sp. L.

Nama harapab, rabab, bosui (seeds), surube (unripe seeds)

This plant is described by Van Damme, et al. (1992).

The seeds of this plant are collected by ants. The Topnaar gather these seeds from the ant nests and add them to tea or coffee for a better flavour, after roasting and grinding them. A porridge can be boiled from the seeds or they can be baked and eaten. The unripe seeds are also ground and added to porridge, giving it a fatty taste. Also the leaves are used to improve the flavour of tea.

#### Liliaceae

Lily family

#### Aloe hereroensis Engler

Nama aukoreb

Triangular, grey-green leaves of 30 cm long and 6 cm wide, with 3-4 mm long brown thorns on the margins, grow in rosettes on a short erect or horizontal stem. Some plants are stemless. The underside of the leaves is white spotted. This plant grows in the mountains of Sesfontein and on the Brandberg. It is common in the Herero territory, as the specific name explains. The yellow-red flowers of about 3 cm long are arranged in a branched, up to 1 m high inflorescence.

A decoction of the leaves is drunk as a remedy for chest and heart pains. The same decoction is given to dogs to treat rabies.

The Herero drink Aloe sap mixed with warm water as a remedy for chest and stomach pains and to treat gonorrhoea.

#### Loganiaceae

Strychnos family, Buddleia family

#### Strychnos sp. L.

Nama -

Common names kaffir orange (E), klapperboom (A)

Only the dried fruits of this tree were found during present research. The exact species could therefore not be identified. The spherical, fleshy, many-seeded fruit of 6-12 cm diameter, with a thick, woody, orange outer shell grows on a tree with opposite leaves and very small flowers.

The pulp of the fruit is eaten raw. The seeds are extremely toxic since they contain strychnine.

#### Mimosaceae

Mimosa family, Acacia family

Acacia tortilis (Forsk.) Hayne ssp. heteracantha (Burch.) Brenan [VdE 18.6.c]

Nama Inarab. Inaras

A description of this tree is given by Van Damme, et al. (1992) together with its uses by other people.

This tree is very common in the Sesfontein valley, where it grows on sandy soil. The Topnaar grind the pods, remove the seeds and boil the remaining pulp with milk, blood or water into an edible porridge (corn or wheat can also be added). The pods are also eaten by their goats. The wood is used as a fuelwood but produces a lot of smoke. The gum, called *hairan* in Nama, is edible.

#### Moraceae

Fig and Mulberry family

Ficus sycomorus L. [VdE 12.4.a]

Nama Inomas

Common names sycamore fig (E), wildevye, gewone trosvy (A)

This tree is described by Van Damme, et al. (1992). Several large fig trees grow in the gardens of Sesfontein.

The wild figs are eaten fresh or dried. The raw fruits can be put in a jar with sugar, which makes a kind of jam. The dried and ground fruits are used as a substitute for coffee.

Other uses are mentioned by Van Damme, et al. (1992).

#### Myrothamnaceae

Myrothamnus flabellifolius Welw. [VdE 20.6.e]

Nama !khōtorotorosen, tōtōsen, !khōtortorsen, !khō ±gō ±gōsen

<u>Common names</u> resurrection bush (E), teebossie (A)

Leaves and stems of this so-called resurrection bush are added to tea. They are also used as a spice.

A complete description is given by Van Damme, et al. (1992), together with many other uses.

#### Olacaceae

Sour Plum family

Ximenia americana L. [VdE 17.6.b]

<u>Nama</u> ≠ēros

Common names sour plum (E), kleinsuurpruim, doring pruim (A)

ximenia is named after Father F. Ximénez (1666-1721), a Dominican who studied the languages, manners, religion and natural history of Central America. This much-branched spiny shrub, which is up to 3 m high, bears straight spines and oval shaped, fleshy, bright green leaves of 2.5 by 1-2.5 cm in size. These are often folded along the midrib. The flowers are very small, greenish-

yellow in colour and grow in groups in the leaf axis. This tree grows wild in the gardens of Sesfontein.

The ellipsoid to ovoid, yellow to red fruits of 3 cm long are eaten raw.

In South Africa lemonade or a beer can be made from the fruits. The Ovambo and Himba use the oil extracted from the seeds as a cosmetic or to soften leather. Many medicinal uses exist all over Africa, e.g. chewing the leaves to treat venereal diseases; using the root for diarrhoea, venereal diseases, sleeping sickness, bilharziasis, stomach pains and as a poultice for headaches; rubbing the bark on the skin for fever; using a mixture of ground bark and root as a dressing for ulcers and ringworm and drinking a leaf decoction as a remedy for cough, fever, wounds and toothache.

#### Pedaliaceae

Sesame family

Harpagophytum procumbens (Burchell) Dc ex.Meissner

Nama || khuripe || khams

Common names grapple vine, devil's claw (E), duiwelsklou (A)

The potato-like tubers of this creeper are used worldwide as a treatment for arthritis and to dissolve kidney and gallstones. They are gathered locally and exported to Europe, where they are made into a tea. The Topnaar of Sesfontein drink a decoction of the tubers or chew them to relieve stomach or post-natal pains. Before gathering the tubers, a needle or button is put in the soil to 'buy the tubers from the earth', the believe is that one will not find tubers otherwise.

The oval leaves are pinnately lobed and covered with glandular hairs, most dense on the leaves' underside. The pink-purple flowers may become as long as 7 cm. The oval, flat fruit that develops has 2 rows of 8 cm long thorns with strong barbs. The specific name refers to the creeping habitus of the plant (procumbere (Lat.), to bend forward, to lay down).

Other people in Namibia use the tubers as a treatment for fever, indigestion and diabetes. An ointment made from the fresh tuber is applied to ulcers, boils and external cancer growths. In Botswana a tuber decoction is drunk to cure any infectious disease and treat female infertility.

#### Periplocaceae

Curroria decidua Planchon ex Hooker fil & Bentham [VdE 23.6.h]

Nama arihaib. Ihinis

Common name bokhorinkie (A)

This upright shrub has red-brown branches with lanceolate leaves, (30-50 by 5-20 mm) which grow in clusters. These leaves are shed yearly (deciduus (Lat.), falling of). Inconspicuous greenish-white-violet flowers are found solitary or grouped in the leaf axils. The fruits are solitary or paired, 7-10 cm long and 6-9 mm wide follicles.

A decoction of the roots is given to rabid dogs.

The Himba make a strong laxative from the roots. This is also used to treat venereal diseases, to expel the afterbirth after parturition and to prevent constipation.

#### Poaceae

Grass family

Setaria verticillata (L) Beauv. [VdE 18.6.a]

Nama ≠areb

Common names bur-bristle grass (E), klitsgras (A)

Typical for this grass are the dense purple-green inflorescences of up to 16 cm long, which resemble brushes. The name *setaria* is derived from the Latin word *seta* (brush). These inflorescences easily stick to clothes of passers-by and the hair and wool of animals. The plant is an annual and becomes up to 1.2 m high. Sometimes secondary roots develop from the lower nodes. The hairy leaves are up to 25 cm long and 22 mm wide. It grows near the springs of Sesfontein, where the soil is very moist.

The seeds are ground and boiled in water, milk or fat to form a porridge.

In South Africa, an alcoholic beverage is brewed from the seeds and hats are weaved from the stalks. This grass is sometimes cultivated.

#### Rhamnaceae

Buffalo-thorn family

Berchemia discolor (Klotsch) Hemsley [VdE 19.6.f]

Nama ≠hûis

Common names bird plum, wild date (E), wilde dadel (A)

This up to 12 m high tree grows in the mountains around Sesfontein. It is not known where the name *Berchemia* comes from. *Discolor* is derived from the Latin words *dis* (separation) and *color* (colour), meaning from different colour, referring to the leaves which are dark green on the upperside and pale green below. Furthermore the leaves are ellpitical and waxen. The small yellowish-green flowers grow in small clusters from the leaf axils and develop into fleshy, egg-shaped drupes which ripen from bluish-green to pale orange.

These fruits are eaten fresh or dried. They can also be cooked in milk and eaten.

This tree is common on the highlands of southern Africa. The fruits can be fermented into an alcoholic drink. A sort of cake can be made from the dried, ground fruits. The Ovambos use the bark as a dark brown dye and the fruit as an orange dye for basketry by boiling the material with the bark or fruits respectively. A leaf decoction is applied to the head for headaches or other illnesses. In Zimbabwe the body is washed with a root decoction to relieve general body pains. In northern Namibia the mouth is rinsed with the fresh fruit juice, boiled with water, for bleeding gums.

Ziziphus mucronata  $W_{\mathrm{ILLD}} = [\mathrm{VdE} \ 19.6.i]$ 

Nama ≠aros

Common names buffalo thorn, shiny leaf (E), wag-'n-bietjie, blinkblaar,

haak-en-steek(A)

This much-branched, thorny shrub or rarely tree of up to 12 m high, with zigzagged young twigs, grows on riverbanks. The oval, up to 6 cm long leaves, are asymmetrical at the base and each leaf is subtended by a pair of thorns of which one is bent so that it hooks you and the other is straight so that it stabs you as you attempt to unhook yourself from the first (this explains the Afrikaans name 'haak-en-steek', meaning hook and stick). The small yellow-green flowers are star-shaped and grow in clusters in the leaf axils.

The bright red to red-brown, round fleshy fruits, 1-2 cm in diameter, with a single hard pip inside, are eaten raw or boiled.

The Ovambo brew an alcoholic beverage from the fruits. A mixture of leaves with cold water is drunk to cure diarrhoea, fever and malaria. Sore eyes are washed with an infusion of the leaves. A root decoction is a treatment for dysentery. In southern Africa, pounded fruits are roasted and ground as a coffee substitute. The tree is used medicinally for several illnesses, such as pneumonia (leaves), stomach and intestinal complaints (root), cough (bark), irregular menstruation (root), glandular swellings (root, leaf), venereal diseases (root), snake bites (root), ....



Figure 2: Ziziphus mucronata

#### Rutaceae Citrus family

Thamnosma africana Engler [VdE 5.4.h]

Nama ≠khanab

Common name flea bush (E)

Drinking a decoction of the whole herb induces vomiting and is used to relieve stomach pains and nausea.

This shrub is described by Van Damme, et al. (1992). More uses are

given there as well.

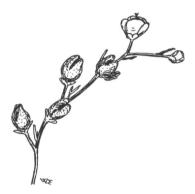


Figure 3: Thamnosma africana

#### Zanthoxylum ovatifoliolatum (Engler) Finkelstein

#### Nama peperhais

This plant's name is derived from the Greek words xanthos (yellow) and xuton (wood), therefore indicating a tree with yellow wood. The branches of this up to 3 m high tree are protected by strong curved spines, smaller spines may be found on the petioles. Odd-pinnate leaves with 2-4 pairs of oval (as ovatifotiotatum indicates), sessile leaflets grow at the end of the twigs. The unisexual flowers probably grow on different trees. The fruit is an orange spherical capsule, 5-6 mm in diameter, covered with large glands (black spots on the fruit), which opens with two valves and contains one round, bluish-black seed.

Fruits and seeds are dried and ground for use as body powder/perfume. A decoction of the fruits is drunk to relieve throat pain.

The Himba drink the same decoction in the case of stomach complaints.

#### Salvadoraceae

Mustard Tree family

Salvadora persica L. [VdE 23.3.a]

Nama khōris

common names tooth-brush tree, salt bush (E), kerriebos (A)

This tree is described by Van Damme, et al. (1992).

The fruits, which smell like cress, are edible but cause diarrhoea. The fruits can be dried, rehydrated and rolled into balls. This is a very nutritious knapsack food. A decoction of the roots is drunk as a cold and cough remedy.

More uses are mentioned by Van Damme, et al. (1992).

#### Scrophulariaceae

Sutera corymbosa (Marloth & Engler) Hiern [VdE 23.6.j, VdE 23.3.j]

Nama blomhain

This annual or perennial shrub is very sticky because of the glands covering all plant parts. The leaves are oval-round, have dentate margins and grow opposite each other. Tubular pink-lilac flowers grow in inflorescences called cymes, *corymbus* in Latin. This plant grows on moist areas in the mountains near Sesfontein.

A decoction of the roots is drunk to relieve all body pains. The roasted, ground root is applied to burns.

#### Solanaceae

Potato family, Nightshade family

Datura innoxia MILLER [VdE 19.6.e]

Nama Iōhais

Common names thorn apple (E), stinkblaar (A)

The herbaceous alien Datura innoxia is common in all riverbeds and rivervalleys of the Namib. It grows 1 m high or higher. The large oval leaves with irregular margins have a foul smell. The tubular, funnel-shaped white flowers are up to 20 cm long and grow solitary in the leaf axis. The fruit is a spiny, pendant, egg-shaped capsule, opening with 4 valves and releasing numerous black seeds at maturity. The generic name is derived from an Indian vernacular name.

A warm leaf is put onto sores in the armpit to draw out pus.

The Ovambo give a root decoction to insane people to quieten them. In South Africa, a decoction of the plant has been used as an intoxicant,

sometimes with fatal results.

#### Solanum incanum L.

Nama soropees

Common names bitter apple (E), bitterappel (A)

The appearance of the leaves of this 1 m high shrub is grey (*incanus* (Lat.) grey), due to the covering with white stellate hairs. Their shape is elliptic, 5-18 by 3-10 cm. Twigs, petioles and calyx are thorny. The lilac flowers develop into yellow berries of 2-3 cm in diameter.

A decoction of the root is drunk to treat venereal diseases and urinary problems.

All over Africa this plant is used medicinally to treat various ailments, such as external tumors, pneumonia, toothache, dandruff, liver troubles, earache, headache, backache, snake-bites, venereal diseases, ....

Withania somnifera (L) Dunal [VdE 21.6.k, VdE 17.4.c]

Nama | auema

Common names bitterappeliefie, geneesblaar, vuilsiektebos (A)

This erect herb to shrub, up to 1.5 m high, covered with stellate hairs, is found near the springs of Sesfontein. This plant has oval, 3-15 cm long leaves and cup-shaped flowers which grow in axillary umbels. The red spherical berries are enclosed in a bladder-shaped inflated green calyx. As the specific name somnifera (Lat.), which means sleep-inducing implies, this plant has a hypnotic effect.

The berries are used by the Topnaar as beads. The ground root is sniffed to treat nose cancer.

The Himba give a root decoction to their cattle as a remedy for diarrhoea. It has been proved that the leaves and root have an antibiotic and antiviral effect. The different tribes of South Africa use all plant parts to cure various diseases.

#### Sterculiaceae

Cacao family

Sterculia africana (Lour.) Fiori

Nama huina

Common name african star-chestnut (E)

This large tree, growing in the mountains of the central and northern Namib, has long-stalked, heart-shaped leaves, covered with stellate hairs. The unisexual flowers grow in panicles on the same tree. The fruits are thick, dark brown woody follicles, covered with tomentose stellate hairs and grow in clusters. The flowers and leaves of some Sterculia spp. smell foul, as the generic name, derived from the Latin word stercus, manure, expresses.

A decoction of the fruit is drunk to relieve pregnancy and post-natal pains.

Himba women drink a bark decoction to relieve post-natal and stomach pains.

#### Tecophilaeaceae

#### Walleria nutans Kirk

Nama || nus

This annual plant of 10-40 cm high has lanceolate leaves. Sometimes small prickles grow on the main nerves of the leaves and on the stems. The lavender-blue, solitary flowers resemble potato flowers.

The potato-like tubers, of about 4 cm diameter, are roasted in hot ashes and eaten whole or mashed. This is very filling foodstuff and is available for 10 months per year.

#### Tiliaceae

Jute family

Grewia tenax (Forsk.) Fiori [VdE 23.6.i]

Nama ≠*âus* 

This shrub, which grows along dry riverbeds, is named after the English physician and plant anatomist N. Grew (1641-1712). It grows up to 3 m high and bears elliptic, opposite leaves of 1.5-4 by 1-2.5 cm, which are covered

with short stellate hairs and have serrated margins. The solitary white flowers, with shorter petals than sepals, develop into orange-red, deeply 4-lobed berries of about 1 cm in diameter.

These fruits are eaten raw.

#### Vitaceae

Grape-vine family

Cyphostemma sp. (Planchon) Alston

Nama kowas

<u>Common name</u> cobas tree (E)

The Namibian *Cyphostemma* species are usually thickset, succulent trees. The bark is pale-coloured and peeling. The leaves are large and trifoliate. Small, yellowish to pale green, tetramerous flowers grow on a succulent stalk in cymes.

The oval to spherical, fleshy fruits of about 1 cm long are eaten raw. The juice can be squeezed out of the fruits and drunk.

#### 2.3 Unidentified Plants

Due to the absence of rains and significant floods in the area during the study period, some plants (mostly annuals) could not be found in the field or were unidentifiable. Only the Nama name and the local uses of these plants are known. The scientific name could also not be found in literature when starting from the Nama name. These plants are listed here in alphabetic order. The order used for the clicks is |,||,|| respectively.

aihaib

A decoction of the root of this small shrub which has red twigs is drunk to treat liver diseases.

anto

The wood of this large tree with large, oval leaves is used for carving.

#### aueb. auib

This is a large tree with oval opposite leaves. A decoction of the ground root or wood is drunk to relieve stomach pains and to treat coughs, heart diseases and lack of appetite. The wood is used for carving, also to carve beads for necklaces.

This tree might be Spirostachys africana (EISEB ET AL, 1991).

#### kaihais

The ground bark of this plant is used as a perfume.

#### sapibes

The raw fruits, composed of 3 or 4 white-brown berries, are eaten.

#### sâun

This is a mixture of grass and other seeds, collected by ants and gathered from ant nests. Porridge is boiled from it. Also beer can be brewed from these seeds. For this hot water and sugar are added to the seeds and this mixture is then fermented.

#### sirin

The dried, ground stems of this plant are used as a perfume.

#### uiai

The tubers are eaten raw or boiled. According to the Topnaar this plant resembles a corn plant.

#### hus

This 2 m high tree has small rhombic leaves and a flakey yellowish-green bark, which is red on young twigs. The wood is used for carving and making furniture. A decoction of the leaves and bark is drunk to treat heart diseases. The gum (hairan) secreted from the branches, mixed with oil or fat is applied on the body as a perfume. The powdery corn wood (lorai) is used as a body powder and a decoction of this wood is drunk to relieve post-natal pains and cure intestinal problems. A decoction of the root is also drunk to relieve post-natal pains. The dead, rotten wood (#gae) is used as a body powder

and baby powder for boys.

#### !gariaôai

Only the very small gray-white seeds of about 1 mm in diameter of this grass were collected. These seeds are ground and used to prepare a porridge.

#### !na =khawab

A decoction of the stems is drunk to relieve stomach pains.

#### !ôasâi

This is a fungus with light brown spores. These spores are used as a facial powder.

#### **±**namin

Only the brown, teardrop-shaped seeds of 2-3 mm long, with darkbrown hard outer shell were seen. They are definitely produced by a grass. A porridge is prepared from the ground seeds.

#### ±nurusôai

According to the Topnaar, these very small, black seeds of 1 mm in diameter grow on a creeping plant with yellow flowers. A porridge is cooked from the ground seeds. Fat can be extracted from the seeds and added to porridge.

# 3. Non-plant Material Used by the Topnaar

Beer is brewed from honey, collected from wild beehives, mixed with water. This honey beer is drunk to cure malaria. The Topnaar also eat the honey for the same treatment.

The powder obtained by grinding red ochre, called !naui, is mixed with fat and rubbed on the face as a cosmetic.

Ash from the fire is applied to wounds and burns.

Several animal products are used medicinally. When children have a col-

lapsed chest, incisions can be made in the chest or back. Roasted and ground kudu skin is set in these incisions. At the same time they drink a decoction of kudu skin and wear a piece of kudu skin around their neck or chest.

When someone has a cold, a goat can be killed and skinned. The stomach content of the goat, or ostrich dung is rubbed on the still warm skin and the person is wrapped in this skin. This will cause sweating. After removing the skin, the body is rubbed with fat.

The bones of goats are roasted and ground. This powder is applied on burns to reduce the pain.

Bird stomachs are dried and ground. A decoction of this powder is given to children to quieten them when they are scared.

Dung is also used in several ways. A decoction of goat dung is drunk as a measle remedy. At the same time the body is washed with this decoction. Fresh chicken dung is rubbed on wounds and burns.

Roasted ostrich dung is sniffed to stop nosebleeds. Ostrich dung and eggshells are roasted and ground. A decoction of this powder is given to children to cure coughs and colds. Their bodies can also be rubbed with this powder.