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SEPASAL is a database and enquiry service about useful "wild" and semi-domesticated plants of tropical and subtropical drylands, developed and maintained at the Royal Botanic Gardens, Kew. "Useful" includes plants which humans eat, use as medicine, feed to animals, make things from, use as fuel, and many other uses.

Since 2004, there has been a Namibian SEPASAL team, based at the National Botanical Research Institute of the Ministry of Agriculture which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources. By August 2007, over 700 Namibian species had been updated.

Work on updating species information, and adding new species to the database, is ongoing. It may be worth visiting the web site and querying the database to obtain the latest information for this species.

## Internet SEPASAL

New query

Edit query

View query results

 *Display help*In names list include:  synonyms  vernacular names and display: 10  names per page*Your query found 1 taxon***Lonchocarpus nelsii (Schinz) Schinz ex Heering & Grimme subsp. nelsii**

Family: LEGUMINOSAE-PAPILIONOIDEAE

**Synonyms**

None recorded

**Vernacular names**

Afrikaans (Namibia)	appelblaar [1304] [5083] [5087] [5098] [5121], wilde appel [5087]
Afrikaans (Southern Africa)	Kalahari-appelblaar [3045] [5082]
Barakwengo-Bushmen (Namibia)	't! hó [5087]
Damara>Nama (Namibia)	!gaas [5098], //uinab [5098]
English	lance pod [2255]
English (Botswana)	Kalahari apple-leaf [5092] [5093] [5177]
English (Namibia)	Kalahari apple-leaf [5111] [5121], apple leaf [5098], panda tree [1304] [5083]
English (Southern Africa)	Kalahari apple-leaf [3045] [5082], Kalahari lance-pod [5082]
Gciriku (Namibia)	mupanda [5087] [5098]
German (Namibia)	Apfelblattbaum [5083] [5098] [5121], Apfelblatt [1304] [5087]
Herero (Namibia)	omupanda [1304] [5083] [5086] [5087] [5091] [5098]
Himba (Namibia)	omupanda [5098]
Jul'hoan (Namibia)	ll'haoh [5083], ll'hào [5101]
Khukh (Namibia)	lloonab [5083], lluinab [5083], !gaas [5083]
Kung Bushmen (Namibia)	//hao [5087] [5098]
Kwangali (Namibia)	mupanda [5083] [5087] [5098] [5121]
Kwanyama (Namibia)	omupanda [1304] [5083] [5087] [5098]
Kxoe (Namibia)	#goo-tlo [5083], tlo [5083]
Lozi (Namibia)	mikololo [5083], mukololo [5083] [5087] [5121]
Mbukushu (Namibia)	ghukororo [5098], mukororo [5087] [5098], mukórooro [5087]
Nama (Namibia)	! haggá ? [5087]
Ndonga (Namibia)	omupanda [5083] [5087] [5098]
Oshiwambo (Namibia)	omupanda [5083]
Rukwangali (Namibia)	mupanda [5083] [5121]
Rumanyo (Namibia)	mupanda [5121]
SeTswana (Botswana)	mhata [5093], mohata [5093], mopanda [5093], mohatla [5177]
Shambyu (Namibia)	mupanda [5087] [5098]
Thimbukushu (Namibia)	mukororo [5083], mukorokoro [5121]
Tswana	mohata [5092]

Tswana (Namibia)	mhata [ <a href="#">5083</a> ]
Unknown (Botswana)	mohatla [ <a href="#">5177</a> ]
Unknown (Zambia)	mukololo [ <a href="#">554</a> ]
Vasekele (Namibia)	mpanda [ <a href="#">5111</a> ]

## Distribution

Plant origin	Continent	Region	Botanical country
Native	Africa	South Tropical Africa	Angola [ <a href="#">2255</a> ], Zambia [ <a href="#">554</a> ], Zimbabwe [ <a href="#">3045</a> ]
		Southern Africa	Botswana [ <a href="#">3045</a> ] [ <a href="#">5104</a> ], Namibia s.l. [ <a href="#">3045</a> ] [ <a href="#">5104</a> ]

## Descriptors

Category	Descriptors and states
DESCRIPTION	Deciduous [ <a href="#">3045</a> ] [ <a href="#">5092</a> ] [ <a href="#">5177</a> ]; Erect; Terrestrial; Shrub [ <a href="#">5101</a> ] [ <a href="#">5104</a> ]; Semi-evergreen/Semi-deciduous [ <a href="#">5121</a> ] [ <a href="#">5177</a> ]; Tree [ <a href="#">554</a> ] [ <a href="#">3045</a> ] [ <a href="#">5082</a> ] [ <a href="#">5101</a> ] [ <a href="#">5104</a> ] [ <a href="#">5111</a> ] [ <a href="#">5121</a> ]; Perennial [ <a href="#">5104</a> ]; Plant Height 1-12 m [ <a href="#">5082</a> ] [ <a href="#">5092</a> ] [ <a href="#">5104</a> ] [ <a href="#">5121</a> ] [ <a href="#">5177</a> ]
CLIMATE	Subtropical, Hot and Arid [ <a href="#">3045</a> ] [ <a href="#">5082</a> ]
SOILS	Deep [ <a href="#">3045</a> ] [ <a href="#">5092</a> ] [ <a href="#">5111</a> ] [ <a href="#">5121</a> ] [ <a href="#">5177</a> ]; Sandy [ <a href="#">554</a> ] [ <a href="#">3045</a> ] [ <a href="#">5082</a> ] [ <a href="#">5091</a> ] [ <a href="#">5092</a> ] [ <a href="#">5098</a> ] [ <a href="#">5101</a> ] [ <a href="#">5111</a> ] [ <a href="#">5121</a> ] [ <a href="#">5177</a> ]; Loamy [ <a href="#">5111</a> ]; Dry [ <a href="#">5082</a> ] [ <a href="#">5092</a> ] [ <a href="#">5111</a> ]
HABITAT	Plateaux [ <a href="#">5121</a> ]; Woodland [ <a href="#">554</a> ] [ <a href="#">5082</a> ] [ <a href="#">5177</a> ]; Shrubland/Bushland/Scrub [ <a href="#">3045</a> ]; Hillsides/Slopes [ <a href="#">5121</a> ]; Dunes [ <a href="#">5121</a> ]; Permanent Watercourses [ <a href="#">5121</a> ]; Pans [ <a href="#">5121</a> ]; Plains [ <a href="#">5121</a> ]; Altitude 850-1450 m a.s.l. [ <a href="#">5104</a> ]
CONSTRAINTS	Susceptible to Parasitic Plants [ <a href="#">5121</a> ]
FURTHER DATA SOURCES	Botanical Illustration [ <a href="#">5082</a> ] [ <a href="#">5092</a> ] [ <a href="#">5093</a> ]; Regional Distribution Map [ <a href="#">3045</a> ] [ <a href="#">5082</a> ]; Botanical Photograph [ <a href="#">3045</a> ]; Habit Illustration/Photograph [ <a href="#">5092</a> ] [ <a href="#">5111</a> ]; Grid Map [ <a href="#">5093</a> ] [ <a href="#">5121</a> ]
SEPASAL DATASHEET STATUS	All Data Transferred from SEPASAL Paper Files [ <a href="#">2255</a> ]
CHEMICAL ANALYSES	Poisonous Compounds - 'roots' [ <a href="#">5098</a> ]

## Uses

Major use	Use group	Specific uses
FOOD ADDITIVES	Bark	stem bark, dairy/dairy-like preparations, rennet substitutes/milk curdlers [ <a href="#">5091</a> ] [ <a href="#">5098</a> ] [ <a href="#">5121</a> ]
ANIMAL FOOD	Unspecified Parts	game mammals, browse [ <a href="#">5177</a> ]; cattle, browse [ <a href="#">940</a> ]
	Fertile Plant Parts	flowers, game birds [ <a href="#">5121</a> ]; flowers, game mammals [ <a href="#">5121</a> ]
	Aerial Parts	leaves, fodder [ <a href="#">5082</a> ] [ <a href="#">5092</a> ] [ <a href="#">5118</a> ] [ <a href="#">5177</a> ]; leaves, mammals, browse [ <a href="#">3045</a> ] [ <a href="#">5091</a> ]; leaves, cattle, browse [ <a href="#">5121</a> ]; leaves, game mammals, browse [ <a href="#">3045</a> ] [ <a href="#">5092</a> ] [ <a href="#">5121</a> ] [ <a href="#">5177</a> ]; cattle [ <a href="#">2255</a> ]
BEE PLANTS		nectar source [ <a href="#">1127</a> ] [ <a href="#">2255</a> ]
MATERIALS	Wood	carved wood, spoons [ <a href="#">5091</a> ] [ <a href="#">5121</a> ]; wood, wheels [ <a href="#">5121</a> ]; wood, agricultural tools [ <a href="#">5121</a> ]; wood, bearings [ <a href="#">5121</a> ]; wood, tools [ <a href="#">5092</a> ] [ <a href="#">5111</a> ]; trunks, furniture [ <a href="#">1304</a> ]
	Other	bark [ <a href="#">5101</a> ]
	Materials/Chemicals	

FUELS [1304] [5111]	Fuelwood	
VERTEBRATE POISONS	Fish	roots, poisonings [5098]
MEDICINES	Infections/Infestations	leaves, humans, colds [5086]; leaves, humans, tuberculosis [5098]; roots, humans, colds, inhalers [5098]
	Inflammation	humans, skin, inflammation, ointments [5111]
	Respiratory System Disorders	bark, humans, coughs [5098]; bark, humans, coughs, oral ingestion [5098]
	Skin/Subcutaneous Cellular Tissue Disorders	leaves, humans, boils, external applications [5098]; leaves, humans, ulcers, external applications [5098]
ENVIRONMENTAL USES [5092] [5121]	Indicators	
	Soil Improvers	live plant in situ, nitrogen fixers, nodulated plants; leaves [5111]
	Ornamentals	flowers [5098]

## Picture

None recorded

## Notes

## NOMENCLATURE/TAXONOMY

### *Name derivation:*

Lonchocarpus is derived from the Greek words meaning "lance-shaped fruits" (i.e "lonche" - Greek for "lance", "karpos" - "fruit", referring to pod shape and "nelsii" commemorates a young man, Nels, who was a plant collector in Namibia in the 1880s [5092] .

## VERNACULAR NAMES

There is another name in Le Roux (1971) which cannot be captured by the database due to a symbol in it [5087] .

## DISTRIBUTION

### *Botswana:*

Common and widespread; locally abundant in mainland areas to south and east of Okavango Delta, including Moremi Wildlife Reserve where it may be dominant over large areas [5177] .

### *Botswana:*

Occurs in the north, southwest and southeast [5093] .

### *Namibia:*

Common in eastern sandveld and occurring locally over the rest of the highlands [5091] .

### *Namibia:*

Grootfontein, the farm Oopval and Otjiwarongo, Okonjatu [5098] [5183] .

### *Namibia:*

Kavango, Kaokoland, Etosha, Grootfontein, Kavango, Outjo, Otjiwarongo, Okahandja, Gobabis and Windhoek districts [5183] .

## RARITY/CONSERVATION

### *Conservation, Namibia:*

Protected by the Forestry Ordinance [5121] .

## DESCRIPTION

*Bark:*

Pale yellow-grey [5082] [5092] [5121] [5177] .

*Bark:*

Smooth [5082] [5101] [5177] .

*Crown:*

Sparse and rounded [5177] .

*Flowers:*

Attractive, mauve to lilac or purplish [3045] [5082] [5111] [5177] .

*Flowers:*

Blue [5098] [5101] .

*Flowers:*

Pea-shaped [5082] [5111] [5177] .

*Flowers:*

White to purple [5121] .

*Fruits:*

A small, flat pod, 5-9 x 1 cm [3045] [5082] [5092] [5098] [5111] [5177] .

*Fruits:*

Finely hairy [5177] .

*Fruits:*

Flat pod, dehiscent [1304] .

*Fruits:*

Pale brown [3045] [5177] .

*Fruits:*

Straw-coloured, very finely velvety, indehiscent [3045] [5082] [5092] .

*Height:*

Often about 4 m, but reaching 7-10 m under favourable conditions [5082] .

*Leaf fall:*

Deciduous to semi-deciduous [5177] .

*Leaf fall:*

Semi-deciduous, with bare trees from July to October and new leaves from September to November [5121] .

*Leaflets:*

1,3 or 5 present [5177] .

*Leaflets:*

Oval to ovate [3045] [5177] .

*Leaves:*

Compound with 1 or 2 pairs of leaflets plus a terminal one, or reduced to single leaflets [3045] .

*Leaves:*

Dark grey, leathery and puckered [3045] [5121] .

*Leaves:*

Densely velvety when young [554] [3045] [5082] [5111] [5177] .

*Leaves:*

Greyish-green [5092] [5101] .

*Leaves:*

Oblong to ovate, up to 12 x 5-6 cm [554] [1304] [3045] [5082] [5101] .

*Leaves:*

Pinnate, broad elliptic [554] [5098] [5177] .

*Leaves:*

Simple, ovate to cordate [1304] [5101] .

*Leaves:*

Usually simple (actually compound leaf reduced to single leaflet) [3045] [5177] .

*Lifeform:*

A small bushy tree [5177] .

*Lifeform:*

Small to medium-sized deciduous tree with yellow autumn colours [3045] .

*Lifeform:*

Younger plants are more shrub-like [5121] .

*Inflorescence:*

Flowers in panicles, usually produced before the new leaves [3045] .

*Leaves:*

Net-veining conspicuously raised below [3045] .

## **FOOD ADDITIVES - BARK**

*Stem bark, milk curdlers, dairy-like preparations:*

The Kaokoland Himba scraped off the scaly outer bark of the branches and use it to promote curdling in milk [5091] [5098] [5121] .

## **ANIMAL FOOD - FERTILE PLANT PARTS**

*Flowers, game birds:*

Flowers are eaten by guinea fowl [5121] .

*Flowers, game mammals:*

The flowers are eaten by dik-dik [5121] .

## **ANIMAL FOOD - AERIAL PARTS**

*Leaves, fodder:*

The leaves provide an excellent fodder [5082] [5092] [5118] [5177] .

*Leaves, game mammals, browse:*

It is an excellent fodder tree, browsed by many animals including kudu, giraffe and elephant [5092] .

*Leaves, game mammals, browse:*

The leaves are browsed by game [3045] .

*Leaves, game mammals, browse:*

The leaves are eaten by giraffe [5121] .

*Leaves, game mammals:*

Impala often eat the leaves from the ground [5092] .

*Leaves, mammals, browse:*

The leaves are browsed by large and small stock [3045] [5091] .

*Cattle, browse:*

Browse species of the Kalahari included in nutrition survey. One of the favourites of cattle keepers and also one of the most nutritious [940] .

## **BEE PLANTS**

*Nectar source:*

It is a good source of nectar for bees in the Kalahari Botswana [1127] [2255] .

The flowers attract honey- and bumble-bees [5121] .

## **MATERIALS**

*Wood properties:*

The wood is a pale colour, light in weight and therefore not commonly used even as firewood [5092] .

*Wood properties:*

The wood is very tough and flexible and does not break or shatter easily [5121] .

## **MATERIALS - WOOD**

*Axe shafts:*

The wood is used for producing axe shafts. For this coppicing stems are cut and manufactured in such a way that the natural knot between the root and the stem forms that part of the axe where the metal blade is fixed [5111] .

*Bearings, wood:*

The wood is used for making bearings for agricultural implements [5121] .

*Chain guides, wood:*

The wood is used for chain guides and to replace oak bearings in modern implements. Particularly used where slow-

moving bearings are needed, and friction would soon wear out metal bearings [5121] .

*Spoons:*

Spoons are carved from the wood [5091] [5121] .

The wood is suitable for household articles [5092] .

*Wheels, wood:*

The wood is used for making ox-wagon wheels [5121] .

*Trunks, furniture:*

The tree trunks are used for three logs around a fire in sitting places where guests are seated or family may gather, especially in the evenings [1304] .

## **MATERIALS - OTHER MATERIALS/CHEMICALS**

*Bark, hunting:*

The bark is chewed and the liquid obtained in this manner is used to soften the poison before game is to be shot [5101] .

## **FUELS - FUELWOOD**

The wood is a good fuel wood [5111] .

*Trunks:*

The tree trunks are used for three logs around a fire in sitting places where guests are seated or family may gather, especially in the evenings [1304] .

## **VERTEBRATE POISONS - FISH**

*Roots, poisonings:*

The root is used as a fish poison [5098] .

## **MEDICINES - INFECTIONS/INFESTATIONS**

*Leaves, humans, colds:*

The leaves are boiled in water and used to treat colds [5086] .

*Leaves, humans, tuberculosis:*

Heikum Bushmen chew the leaves for tuberculosis [5098] .

*Roots, humans, colds, inhalers:*

The smoke of glowing roots is inhaled for colds [5098] .

## **MEDICINES - INFLAMMATION**

*Humans, skin, ointments:*

The frass of a larvae called 'madj'anna found on the tree is used for the treating suppurating skin inflammations. The frass is burnt and the resulting ash is then mixed with vaseline. This ointment is applied to the wounds several times a day as necessary until the inflammation is totally healed [5111] .

## **MEDICINES - RESPIRATORY SYSTEM DISORDERS**

*Bark, humans, coughs, oral ingestion:*

The Herero chew the green bark and swallow the sap for coughs [5098] .

*Bark, humans, coughs:*

Heikum Bushmen use the boiled bark as a cough remedy [5098] .

## **MEDICINES - SKIN/SUBCUTANEOUS CELLULAR TISSUE DISORDERS**

*Leaves, humans, boils, ulcers, external application:*

Heikum Bushmen use the leaves as a compress for boils and ulcers [5098] .

## ENVIRONMENTAL USES - INDICATORS

In Moremi and in the Delta, the Kalahari apple-leaf grows strictly on sandy soils which together with *Terminalia sericea* and *Combretum collinum* are the most prominent indicators of sand [5092] .  
It is an indicator of fertile soil in northern Namibia [5121] .

## ENVIRONMENTAL USES - SOIL IMPROVERS

The leaves have a soil-improving effect [5111] .

## NUTRITIONAL VALUE

### *Leaf:*

Feb 1978 IVDMD 44.2%, CP 26.2%, P0.16%, Ca 1.02%. Feb 1979 IVDMD 42.4%, P 0.03%, Ca 0.50%. Jul 1978 IVDMD 45.6%, CP 16.1%, P 0.09%, Ca 1.42%; Twigs Feb 1978 IVDMD 37.8%, CP 12.0%, P 0.09%, Ca 1.19%. Feb 1979 IVDMD 45.4%, CP 14.5%, P 0.09%, Ca 0.95%. Jul 1978 IVDMD 40.2%, CP 9.6%, P 0.06%, Ca 1.25% [940] .

## CLIMATE

Occuring in hot, dry bushveld [3045] .  
Occuring in various types of hot, dry woodland [5082] .

## RAINFALL

300-350 mm [2255] .

## TEMPERATURE

### *Daily variation:*

Maximum 20-25°C, minimum 0-10°C [2255] .

## SOILS

Found on the deep, sandy soil found in the Kalahari [5092] [5111] .

### *Namibia:*

On deep sand, occasionally on calcrete or dolomite [5121] .

### *Namibia:*

Sand-favouring tree, common in eastern sandveld of Kaokoland [5091] .

### *Namibia:*

Sandveld, south of Tsumkwe [5101] .

Poor red sand [2255] .

### *Southern Africa:*

Often on Kalahari sand [554] [3045] [5082] .

## VEGETATION

### *BOtswana:*

Occurs in deep sand as part of short woodlands [5177] .

Associated with the silver cluster-leaf (*Terminalia sericea*) and the weeping bushwillow (*Combretum collinum*).  
Others are the wild seringa (*Burkea africana*) and the camelthorn (*Acacia erioloba*) [5092] .

## ENVIRONMENTAL FACTORS - MISCELLANEOUS

### *Fire:*

It is sensitive to fire [5092] .



*Frost:*

Ground frost in Kalahari [2255] .

## FLOWERING/FRUITING/SEED SET

*Flowering, Botswana:*

Spring to early summer [5177] .

*Flowering, Namibia:*

August to November [5121] .

*Flowering, Southern Africa:*

September to October [5082] [5092] [5111] .

*Flowering, Zambia:*

September [554] .

*Fruiting, Namibia:*

September to April [5121] .

*Fruiting, Southern Africa:*

October to January [5082] [5092] .

## GERMINATION

*Namibia:*

Germination trials at the Forestry Research Station Kanovlei showed a germination rate of 67% with no seed pre-treatment, using seed from 1994 which had been removed from the pod in 1994 and stored [5111] .

The seeds take about three weeks to germinate and then grow slowly [5092] .

## ASSOCIATED INSECTS

Larval food plant for the butterfly *Charaxes bohemani* [3045] .

## PARASITIC PLANTS

*Plicosepalus:*

Susceptible to parasites such as *Plicosepalus* species, which appear to have killed some specimens [5121] .

## PROPAGATION FROM SEED

Pick ripe fruits and place them in a bag. Break the exocarp of the ripe fruits by pounding them in the bag. Sow while still fresh, in light, aerated soil in sunny, protected places. The seeds take about three weeks to germinate and then grow slowly [5092] .

## ACKNOWLEDGEMENTS AND DATASHEET PROGRESS

Updated for Southern Africa by M. Sinkela; checked by C. Mannheimer; SEPASAL Namibia, National Botanical Research Institute; January 2005 .

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