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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which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources.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

Edit query New query View query results Display help In names list include: synonyms vernacular names and display: 10 names per page Your query found 1 taxon

Aloe dichotoma Masson

Family: ALOACEAE

Synonyms

Aloe montana Schinz

Vernacular names

Afrikaans (Namibia) kokerboom [2136]

Afrikaans (Southern Africa) kokerboom [5082] [5222] English (Namibia) quiver tree [2136] [5121] English (Southern Africa) quiver-tree [5082] [5222] German (Namibia) Köcherbaum [5121]

Khoekhoegowab (Namibia) llgaras [5121]

Nama (Namibia) llgara [5095], llgarab [2136], llgaras [5084]

San (Southern Africa) choje [6282] [6284]

Partial distribution

Plant origin	Continent	Region	Botanical country
Native	Africa	Southern Africa	Cape Province [5082]
			[5104] [5222], Namibia s.l.
			[5082] [5104] [5222]

ISO countries: South Africa [5082] [5222]

Descriptors

Category	Descriptors and states	
DESCRIPTION	Evergreen [6379]; Single Stemmed [3050] [5121] [6282] [6379]; Hermaphrodite [6379];	
	Slow Growth Rate [5222]; Tree [2136] [5104] [5222] [5224]; Perennial [5104]; Fibrous	
	Roots Present [6166]; Succulent - stems [5121]; Succulent - leaves [5121]; Plant Height 3-	
	12 m [<u>2136</u>] [<u>5082</u>] [<u>5104</u>] [<u>5222</u>]	
CLIMATE	Not Frost Tolerant [5082]; Marked Dry Season [6166]; Subtropical, Hot and Arid [6166]; Annual Rainfall <= $200 \text{ mm} [5106] [5121]$	
SOILS	Well Drained [6166]; Boulders/Rocky [5082] [5121] [5222]; Gravels/Stony [5082]; Dry [5082]	

Lowland [5104]; Non-Coastal Regions [6166]; Upland [5121]; Montane [5121]; Valleys **HABITAT** [6280]; Dominant within Stands of Natural Vegetation [6166]; Cliffs [6166];

Hillsides/Slopes [5082] [5121]; Outcrops/Kopjes/Inselbergs [5121] [6726]; Desert [5082]; Semi-Desert [5082]; Non-Permanent Watercourses [5223]; Plains [5121]; Altitude 610-915

m a.s.l. [5104]

WOOD PROPERTIES Very Soft [6282]; Low Density [6282]

PRODUCTION AND Traded Locally [6166]; Used in Tourism/Handicraft Industry [6166]

VALUE

SOURCES OF Living Collections (non-Kew) [6725]

PLANTING MATERIAL

SOURCES

CONSERVATION Listed on Appendix II of CITES [5121]

FURTHER DATA

Botanical Illustration [5224] [6282]; Additional References [1185] [1482] [5327]; Regional Distribution Map [5082]; Botanical Photograph [5224] [6280] [6282] [6284] [6379] [6726]; Detabases [5123] [5227] [6105]; Habit Illustration (Photograph [2136] [5082] [5121] [5222]

Databases [5123] [5327] [6195]; Habit Illustration/Photograph [2136] [5082] [5121] [5222] [5223] [6280] [6282] [6283] [6284] [6379]; Grid Map [5121] [6194] [6726]

live plant in situ, landscapes [6166]; live plant in situ, gardens [5121]

SEPASAL

All Data Transferred from SEPASAL Paper Files; Geographical Checks Completed for

Africa

Use groun

Ornamentals

DATASHEET STATUS

Uses

Major use

Major use	Ose group	Specific uses
ANIMAL FOOD	Exudates	nectar, birds [5082]; nectar, game mammals [5082]; nectar, primates [5082]
	Aerial Parts	fallen leaves, sheep, forage [5121]
BEE PLANTS		nectar source [1482]
MATERIALS	Fibres	trunks [5084] [5095]
	Other Materials/Chemicals	bark, quivers [2136]; defoliated stems/branches, quivers [2136] [5082] [5222] [6282]
MEDICINES	Unspecified Medicinal humans [123] [2255] Disorders	
	Infections/Infestations	roots, humans, tuberculosis, oral ingestion [2136] [5095]
	Respiratory System Disorders	roots, humans, asthma, oral ingestion [2136] [5095]
ENVIRONMENTAL USES [6166]		
	Shade/Shelter	deserts [5223]

Specific uses

Picture

None recorded

Notes

NOMENCLATURE/TAXONOMY

It is the famous 'kokerboom' recorded by Simon van der Stel in 1685 and refered to as 'Aloe arborescens' [5223] [6282].

'Dichotomos' in Greek means 'split in two', referring to the bifurcated branching [5082] [5222] [6280] .

[6166]

There is some taxonomic disagreement about Aloe dichotoma and whether it has two varieties or whether A. ramosissima is a separate species. Information in Germishuizen and Meyer (2003) for variety dichotoma has been

entered here [5104] [6726].

VERNACULAR NAMES

The Bushmen custom of using soft branches as quivers for their arrows gave rise to the name kokerboom, or quivertree, by which it has been known ever since (by Europeans) [5082].

Khoekhoegowab (Namibia):

The name //garas refers to the stony/rocky gound on which these plants grow [6724].

DISTRIBUTION

Namibia:

Uncommon to common across the south and central-western escarpment [5121].

Namibia:

Widespread in southern Namibia especially along the Fish River and northwards to Usakos [5223].

South Africa:

In Namaqualand and Northwestern Cape [5222] .

South Africa:

As far south as 31 degrees south and eastwards along the Gariep (Orange) River to east of Upington [6726].

RARITY/CONSERVATION

Namibia:

Protected by the Nature Conservation Ordinance in Namibia [5121].

DESCRIPTION

Bark:

Older stem pale to deep yellow, rough, splitting and peeling in segments [5121].

Bark:

Smooth and grey [5121].

Bark:

Smooth, occasionally flaking and frequently folded like melting wax [5082].

Bark:

The bark on the branches is pearly grey [5082].

Branches:

Split into two and have a smooth bark [2136].

Flowers:

Bright yellow [5121] [5222] [5224].

Flowers:

Canary-yellow, upright above the leaf rosettes [5082].

Flowers:

Fleshy, vellow, up to 35 mm long, arranged in about 30 cm long spikes [2136] [5082].

Flowers:

Tubular, on woody stalks carried above the leaf rosette [5121].

Height:

Can grow to a height of 12 m [5222].

Height:

Usually 3-4 m, occasionally reaching 7 m [5082].

Inflorescence:

Dichotomous, rachis is about 6 cm and raceme 15 cm long [5222].

Leaves:

25-35 cm long and 5 cm wide, triangular [2136] [5082].

Leaves

Bluish green or yellowish green to brownish, with a very narrow, yellowish brown margin and fine, yellowish brown teeth which almost completely disappear on old leaves [5082].

Leaves:

Lanceolate, acute, stem clasping and smooth and the margins are horny-toothed [5222].

Leaves:

Large, oblong, boat-shaped, grey-green to brown-green [5121].

Leaves:

On each branch are large leaf rosettes which consist of fleshy, grey-green leaves [5222].

Leaves:

Simple, in terminal rosette [5121].

Lifeform:

Always a tree [5121].

Stems:

Simple, branching and rebranching dichotomously from the middle of its height of 6-9 m [5121] [5223].

Stems:

A giant aloe species with trunks which are 4 m in circumference can grow to a height of 12 m [5222].

Stems:

Thick, peculiar, corky trunks [5222].

Stems:

Up to 1 m or more in diameter at ground level but tapering above this and branching and rebranching from approximately halfway up [5082].

Stems:

Very thick trunk [2136] [5082].

Bark:

Cracks into golden-brown scales with razor-sharp edges [6283].

Fruits:

30 mm long, 18 mm in diameter at the middle, on a short stalk, initially supported by the cup-shaped remains of the dried flower [6282].

Fruits:

An erect, cylindrical, oblong, papery capsule [5150].

Fruits:

The large capsule has a velvety covering [6280].

Leaves:

In young plants the leaves are arranged in 4 vertical ranks (rows) [6280].

Height:

Generally 1-3 m, often 3-8 m, rarely over 8 m high. One exceptional, 6 m tall individual was recorded from the Usakos area with a trunk circumference of 6.3 m, a diameter of 2.3 m at the base, and a crown diameter of about 7 m [5121] [5327].

IDENTIFICATION

It is closely related to the shrubby Aloe ramosissima and the other western tree species, Aloe pillansii. It can be distinguished from the latter by its 3-5 branched erect inflorescence of yellow flowers; in A. pillansii the inflorescence is lateral and curves downwards among the lower leaves of the rosette whereas in both A. ramosissima and A. dichotoma, the inflorescence is terminal. A. dichotoma keeps to the crests of the hills and their slopes, and is seldom seen in the valleys [5223].

It can be distinguished from Aloe pillansii by the yellowish leaf edge [6379].

ANIMAL FOOD - EXUDATES

Nectar, birds:

Swarms of birds are attracted to the copious nectar [5082].

Nectar, *primates*:

Baboons tear the flowers apart to reach the sweet liquid, often stripping a tree of its blossom within a very short time [5082].

ANIMAL FOOD - AERIAL PARTS

Fallen leaves, sheep, forage:

Sheep eat the dry leaves on the ground [5121].

MATERIALS - FIBRES

Trunk:

In Namibia the porous inner fibre of the trunk is used as a cooling material by the Nama. Sometimes the whole trunk is cut out and the whole plant used as a cooler [5084] [5095].

MATERIALS - OTHER MATERIALS/CHEMICALS

Quivers, bark:

In the past, the bark was used as a quiver for arrows [2136].

Quivers, defoliated stems/branches:

In the past, the hollow branches were used as a quiver for arrows [2136] [2795] [5082] [5222].

Quivers, branches:

The natives hollow the branches and cover one end with a piece of leather to make a strong and serviceable quiver [6282].

MEDICINES - INFECTIONS/INFESTATIONS

Roots, humans, tuberculosis, oral ingestion:

A decoction from scraped root is drunk by the Topnaar to treat symptoms of TB [2136] [5095].

MEDICINES - RESPIRATORY SYSTEM DISORDERS

Roots, humans, asthma, oral ingestion:

A decoction from the scraped root is drunk by the Nama to treat asthma [2136] [5084] [5095].

ENVIRONMENTAL USES - SHADE/SHELTER

Deserts:

It is a great boon to the social weaver birds, who build their 'haystack' nests in its branches [5223].

ENVIRONMENTAL USES - ORNAMENTALS

Live plants in situ, gardens:

Popular with the horticultural trade [5121].

Live plants in situ, landscapes:

The Quiver tree forests in southern Namibia are a tourist attraction which brings income to the south [6166].

RAINFALL

Will not thrive in areas with a very heavy rainfall [5222].

TEMPERATURE

Minimum of 7°C [5224].

Up to 33°C [6280].

TOPOGRAPHY/SITES

It grows mainly in rocky places where the thick trunks blend prettily with the rocks [5222].

Mainly on rocky hill-slopes and hilltops, but also rocky outcrops and plains, sometimes on rocky outcrops in dunes [5121].

Occurring on and among rocky hills, where they are a conspicuous feature of the landscape [5082].

SOILS

Namibia:

Never on sand [5121].

VEGETATION

Found in the mountains of the pro-Namib [2136].

Native to the Namib desert [2255].

Often in monospecific "forests" [6166].

FLOWERING/FRUITING/SEED SET

Flowering, Southern Africa:

June to August [5082].

Flowering, Namibia:

April to June, with occasional records till December [5121].

Fruiting, Namibia:

September to November [5121].

Namibia, South Africa:

The principal flowering period is the core winter months of June to July (August). Some populations flower as early as March, others flower in April or May, while others flower in September or October [6726].

VEGETATIVE GROWTH

Growth rate:

Grows very slowly [5222].

PHYSIOLOGICAL TOLERANCES

The plant does not survive well in cold and damp areas. It may rot if it is cold and damp $[\underline{5082}]$ $[\underline{5224}]$.

ASSOCIATED BIRDS

Sociable weavers and woodpeckers nest in these trees [5121].

ASSOCIATED INSECTS

Orthoptera:

Swarms of locusts are attracted to the copious nectar [5082].

INSECT PESTS

Homoptera:

Sometimes susceptible to scale insects [5121].

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