



This report was generated from the SEPASAL database (www.kew.org/ceb/sepasal) in August 2007. This database is freely available to members of the public.

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which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources.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

[<u>5452</u>], Transvaal [<u>5104</u>]

Internet SEPASAL

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

Enneapogon cenchroides (Roem. & Schult.) C.E.Hubb. [5104]

Family: POACEAE

Synonyms

Enneapogon mollis Lehm.

Pappophorum cenchroides (Roem. & Schult.)

Vernacular names

Afrikaans (Namibia) eenjarige negenaaldgras [5083] [5115] [6711], suurgras [2259]

gewone negenaaldgras [2259], negenaaldgras [5117], suurgras [2259], tuingras [2259] Afrikaans (South Africa)

Afrikaans (Southern Africa) vaalsuurgras [5163]

Damara (Namibia) !nabise [<u>5095</u>], lhuru lgâ.b [<u>5095</u>]

Sabi grass [2259], common nine-awned grass [5083] [5115] [6711], fur grass [2259] English (Namibia)

English (South Africa) fur grass [2259], nine-awned grass [5117]

nine-awned grass [5163] [5664] English (Southern Africa)

English (Zimbabwe) Sabi grass [2259]

German (Namibia) Einjähriges Neunborstengras [5083] [5115] [6711], Neunborsten sauergras [2259]

Khoekhoegowab (Namibia) lgâ.b [5115], lhuru [5083] [5115], lnabise [5083] [5115]

Oshiwambo (Namibia) omwiidi [<u>5115</u>]

Otjiherero (Namibia) ongumba [<u>5083</u>] [<u>5115</u>]

Portuguese (Mozambique) rabo de cão [2259]

Sotho (South Africa) letsoa [2259], letswi [2259]

Tonga (Zimbabwe) kaBwela [2259]

Unknown (Mozambique) chilauanzana [2259], dimba [5480], umbuandimba [5480]

Partial distribution

Plant origin	Continent	Region	Botanical country
Native	Africa	South Tropical Africa	Angola [5126], Mozambique [5480], Zimbabwe [3] [5125]
		Southern Africa	Botswana [3] [5104] [5186], Cape Province [5104], Caprivi Strip [5115], Namibia [5104], Natal [5104], Orange Free State [5104], Swaziland

Status Unknown	Africa	East Tropical Africa	Kenya [3], Tanzania [3], Uganda [3]
		Middle Atlantic Ocean	Ascension [3]
		Northeast Tropical Africa	Sudan [2259]
		South Tropical Africa	Zambia [<u>5481</u>]
	Asia-Temperate	Arabian Peninsula	Saudi Arabia [2259]

ISO countries: India [2259], South Africa [2259] [5104]

Descriptors

Category	Descriptors and states
DESCRIPTION	Annual [3] [5104]; Perennial [3] [5104]; Plant Height 0.3-1.15 m [2259]
CLIMATE	Marked Dry Season [5104]; Subtropical, Hot and Arid [3] [5104]; Annual Rainfall 100-600 mm [6146]
SOILS	Deep [5123]; Limestone Parent Material [5123] [5163]; Well Drained [5123]; Shallow [5123]; Boulders/Rocky [3]; Gravels/Stony [5123] [5664]; Sandy [3] [2182] [5123]; Dry [3]; Sandy Loams [5123]; Silts [5123]
HABITAT	Pioneer Species [5664]; Woodland [3]; Shrubland/Bushland/Scrub [2259]; Dominant within Stands of Natural Vegetation [5664]; Grassland/Forb-Land [3] [2182] [2259] [5123]; Wooded Grassland [2182] [5123]; Hillsides/Slopes [3]; Outcrops/Kopjes/Inselbergs [5123]; Semi-Desert [2182]; Non-Permanent Watercourses [3]; Anthropogenic Landscapes [3] [2182] [2259] [5123]; Croplands [3] [2259]; Altitude 60-2300 m a.s.l. [5104]
PHYSIOLOGY	Grazing/Browsing Resistant [5117]; C4 [2182]; Drought Tolerant [5117]
PRODUCTION AND VALUE	Wild Plants Utilised [6711]
SOURCES OF PLANTING MATERIAL	Other Seed Sources [5181]
FURTHER DATA SOURCES	Botanical Illustration [3] [2182] [2259] [6711]; Regional Distribution Map [2259] [5117] [5664]; Botanical Photograph [2182] [5664]; Databases [5123] [5341] [6195]; Habit Illustration/Photograph [5117] [5664]; Grid Map [2182] [5115] [5123] [6711]
SEPASAL DATASHEET STATUS	Taxon Recently Added from Literature [6040]
CHEMICAL ANALYSES	Nutritional Analyses - aerial parts [5251]; Proteins - aerial parts [5251]

Uses

Major use	Use group	Specific uses
ANIMAL FOOD	Aerial Parts	unspecified aerial parts, mammals, grazing [2259] [5117] [5123] [6711]
ENVIRONMENTAL USES	Erosion Control	eroded land [6711]
	Shade/Shelter	other environmental materials [2259]
	Indicators	rangelands [5117]
GENE SOURCES		drought resistance [5664]

Picture

Notes

NOMENCLATURE/TAXONOMY

Name derivation:

From Greek 'ennea', nine, and 'pogon', beard, alluding to the nine plumose or bearded awns of the lemma of the fertile floret. 'Cenchroides', looking like Cenchrus [2259].

VERNACULAR NAMES

Portuguese (Mozambique) - chilauanzana:

The name is used in the Alto Limpopo region [2259].

DISTRIBUTION

Angola:

Cuando-Cubango, Cunene, Namibe Provinces [5126].

Mozambique:

Gaza, Inhambane, Maputo Provinces [5480].

South Africa:

Limpopo, Mpumalanga, Northwest, Gauteng, Free State, KwaZulu/Natal Northern Cape and Western Cape Provinces [5104].

Worldwide:

From southern Africa north to Sudan, through Arabia to India [2182].

RARITY/CONSERVATION

Namibia:

In 1994 it was assessed as lower risk, least concearn [5400].

DESCRIPTION

Habit:

A loosely caespitose annual or rarely short-lived perennial, densely glandular-pubescent all over [3].

Height:

0.3-1.15 m [2259].

Height:

Up to 1 m [2182] [5104].

Inflorescences:

Panicle 30-150(200) mm long, spike-like, usually dense and contracted, rarely somwhat open below, compact, rarely interrupted. Spikelets 3-5 mm long, usually crowded, 3-flowered. Glumes slightly unequal, light to dark grey or grey-green [3].

Leaves:

Leaf sheaths relatively tight, usually slightly shorter than the internodes, striate, smooth or somewhat asperulous towards the mouth. Leaf laminae $30-250 \times (1)3-7(10)$ mm, linear to lanceolate-linear, long-tapering to a fine point, expanded or convolute (often only towards the apex) [3].

Lifespan:

Annual or short-lived perennial [3].

Stems:

Culms 0.15-1 m tall, 2-5 noded, rather stout, geniculately ascending, seldom erect, sometimes decumbent, simple or branched below [3].

Stems:

The lower nodes are knee-like bent, sometimes with root formation [5664].

IDENTIFICATION

Enneapogon cenchroides is sometimes confused with Cenchrus ciliaris or Schmidtia kalihariensis, which may occur in the same habitat. The inflorescence of C. ciliaris is a dense spike, as opposed to the panicle of Enneapogon cenchroides. Schmidtia kalihariensis has only five awns per spikelet and an unpleasant, sour smell [5117]. The lemmas of the spikelet typically have nine hairy awns (visible under magnification) [5664].

ANIMAL FOOD - AERIAL PARTS

Unspecified aerial parts, mammals, grazing:

Grazing value variable, but usually low. Of particular value in low-rainfall areas, where the grass can form thick stands, giving a relatively high-yield [5117].

Unspecified aerial parts, mammals, grazing:

In Namibia heavily grazed [5123].

Unspecified aerial parts, mammals, grazing:

In Namibia it is a very valuable forage grass and contibutes substantially to the grazeable material of the veld.

Homogeneous stands produce high yields [6711].

Unspecified aerial parts, mammals, grazing:

Valuable grazing grass in the warmer, low-rainfall areas [2259].

ENVIRONMENTAL USES - EROSION CONTROL

Eroded land:

It can quickly cover bare ground, counteracting erosion [6711].

ENVIRONMENTAL USES - SHADE/SHELTER

Other materials used:

In southern Africa weaver birds nests have been found lined with spikelets of E. cenchroides [2259].

ENVIRONMENTAL USES - INDICATORS

Rangelands:

Regarded as an indicator of overgrazing and other disturbances. It is a species that increases with severe overstocking [5117].

NUTRITIONAL VALUE

Aerial parts, protein, phosphate, calcium, OM, DM, crude protein, ADF, NDF, fat, in-vitro digestibility, metabolisable energy, gross energy:

In Namibia 9 samples (that included samples taken which imitated sheep) were analysed. The following result are a summary of the tests presented as ranges (minimum to maximum). Crude protein 2.40-9.31%, P 0.04-0.15%, Ca 0.39-5.06%, OM 62.76-94.45%, DM 93.08-99.04%, crude fibre 15.00-42.16%, ADF 38.42-63.65%, NDF 25.92-78.73%, fat 0.83-3.05%, in-vitro digestibility 58.40%, metabolisable energy 8.20 MJ/kg, gross energy 16.89 MJ/kg [5251] .

CONSTRAINTS - MISCELLANEOUS

Copious pollen produced by E. cenchroides is probably one of the major culprits causing hayfever where it occurs in dense stands [6711].

RAINFALL

Southern Africa:

Very valuable in areas with a low rainfall in the western parts [5664].

ALTITUDE

Southern Africa: 60-2300 m [5104].

TOPOGRAPHY/SITES

South Africa:

In disturbed places and overgrazed veld [2182].

SOILS

Namibia:

Limestone, calcareous, quartzite, shallow and deep soils, silty sands, rocky outcrops [5123].

South tropical Africa:

On poor sandy soil, often on rocky hillsides [3].

Southern Africa:

Mostly in sandy, gravelly soil, common in limestone areas or heavier soils [5117] [5664].

VEGETATION

Namibia:

Mopane, Boscia, Acacia mellifera, A. hebeclada, Combretum apiculatum and low mopane savanna [5123] . *South tropical Africa*:

Widely distributed in woodland, open grassland, cultivated and disturbed areas, in dried up streams etc. [3] . *Southern Africa*:

Can occur in dense stands in veld, especially after droughts and/or overgrazing. A useful pioneer that can quickly colonise and protect disturb veld [5664].

Southern Africa:

Savanna, Grassland, and Nama-Karoo [2182].

Southern Africa:

Widespread in the northern parts of southern Africa. Not a common species in the Kalahari dune veld [5163].

ENVIRONMENTAL FACTORS - MISCELLANEOUS

Southern Africa:

Able to withstand very harsh conditions [2259].

Southern Africa:

Can occur in dense stands in veld, especially after droughts and/or overgrazing. A useful pioneer that can quickly colonise and protect disturb veld [5664].

FLOWERING/FRUITING/SEED SET

Flowering, southern Africa:

December to May [2259] [5664].

Flowering, southern Africa:

Throughout the year (usually in summer, but occasionally in winter in the north) [2182].

CYTOLOGY

For the genus x = 9, 10 [2182].

PHOTOSYNTHESIS

K-PS-NAD anatomy with C4-NADP-ME physiology [2182].

ASSOCIATED INSECTS

Hymenoptera:

Small brown ants have been seen taking fallen florets into their nests [2259].

ACKNOWLEDGEMENTS AND DATASHEET PROGRESS

Updated for southern Africa by E. Irish, checked by C. Mannheimer; SEPASAL Namibia, National Botanical Research Instititue, August 2007.

References

- [3] Flora Zambesiaca. 1960-. London: Crown Agents for Overseas Governments and Administrations. En. Edited by A.W. Exell et al.
- [2182] Gibbs Russell, G.E., Watson, L., Koekemoer, M., Smook, L. et al. 1990. *Grasses of Southern Africa*. Pretoria, South Africa: National Botanic Gardens/Botanical Research Institute. 437p. Mem. Bot. Survey South Africa No. 58. [2259] Chippindall, L.K.A. and Crook, A.O. 1976. *Grasses of Southern Africa*. Salisbury, Rhodesia: M.O. Collins. 240 parts in loose leaf form.
- [5083] Craven, P. and Kolberg, H. In prep. Common names of Namibian plants. Windhoek.
- [5095] Sullivan, S. 1998. *People, plants and practice in drylands: socio-political and ecological dimensions of resource-use by Damara farmers in north-west Namibia*. London: University College London. Unpublished PhD. thesis.
- [5104] Germishuizen, G. and Meyer, N.L., eds. 2003. *Plants of southern Africa: an annotated checklist*. Strelitzia 14. Pretoria: National Botanical Institute.
- [5115] Klaassen, E.S. and Craven, P. 2003. *Checklist of grasses in Namibia. SABONET Report No. 20.* Pretoria and Windhoek: Southern African Botanical Diversity Network.
- [5117] Van Oudtshoorn, F. 1992. Guide to grasses of South Africa. Arcadia, Pretoria: Briza Publications. 301p.
- [5123] National Herbarium of Namibia. Undated. *Specimen Database (SPMNDB)*. Windhoek: National Botanical Research Institute of Namibia.
- [5125] Chapano, C. 2002. A checklist of Zimbabwean grasses. SABONET Report No. 16. Pretoria: Southern African Botanical Diversity Network.
- [5126] Costa, E., Martins, T. and Monteiro, F. 2004. *A checklist of Angola grasses Checklist das Poaceae de Angola. SABONET Report No. 28.* Pretoria: Southern African Botanical Diversity Network.
- [5163] Van Rooyen, N. 2001. Flowering plants of the Kalahari dunes. Pretoria: Ecotrust cc.
- [5181] National Plant Genetic Resources Centre. undated. Windhoek, Namibia: National Botanical Research Institute of Namibia.
- [5186] Kabelo, M. and Mafokate, D. 2004. *A checklist of Botswana grasses. SABONET Report No. 24*. Gaborone and Pretoria: Southern African Botanical Diversity Network.
- [5251] Ministry of Agriculture, Water and Rural Development. 2004. *Chemgrass Database*. Windhoek, Namibia: MAWRD Agricultural Laboratory.
- [5341] National Plant Genetic Resources Centre. undated. *Database*. Windhoek, Namibia: National Botanical Research Institute of Namibia. En.
- [5400] Craven, P. and Loots, S. 2002. Namibia. Pretoria, Southern African Botanical Diversity Network. Pp. 61-92.
- [5452] Braun, K.P., Dlamini, S.D.V., Mdladla, D.R., Methule, N.P. et al. 2004. *Swaziland flora checklist. SABONET Report No. 27*. Pretoria: Southern African Botanical Diversity Network.
- [5480] Da Silva, M.C., Izidine, S. and Amude, A.B. 2004. *A preliminary checklist of the vascular plants of Mozambique*. *SABONET Report No. 30*. Pretoria: Southern African Botanical Diversity Network. 183p.
- [5481] Phiri, P.S.M. 2005. A checklist of Zambian vascular plants. SABONET Report No. 32. Pretoria: Southern African Botanical Diversity Network. 167p.
- [5664] Van Oudtshoorn, F. 2004. Guide to grasses of Southern Africa. Pretoria: Briza Publications. En. 288p.
- [6040] SEPASAL Namibia. 2005/2006. National Botanical Research Institute of Namibia. Windhoek: Namibia.
- [6146] 2006. http://www.bgc-jena.mpg.de/bgc-processes/publdata.namibia.pdf. 09/02/2006.
- [6195] National Herbarium, Pretoria (PRE). Undated. *Specimen Database*. Pretoria: South African National Biodiversity Institute.
- [6711] Müller. 2007. Grasses of Namibia. Windhoek: Ministry of Agriculture, Water and Forestry. 318 p. revised ed.

SEPASAL's development has been funded by The Clothworkers' Foundation and its Internet development is funded by The Charles Wolfson Charitable Trust. Nutritional information on African wild foods is funded by Nestlé Charitable Trust.

All data © The Trustees of the Royal Botanic Gardens, Kew, 1999-2007 Full copyright statement
If you wish to cite SEPASAL, please read this first
To send us feedback and bug reports, please click here