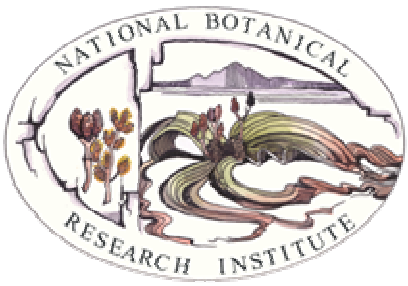

This report was generated from the SEPASAL database (www.kew.org/ceb/sepasal) in August 2007. This database is freely available to members of the public.

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which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources.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

Internet SEPASAL

New query | Edit query | View query results | *Display help*

In names list include: synonyms vernacular names **and display:** All names per page

Your query found 29 taxa

Cyperus usitatus Burch. [5104]

Family: CYPERACEAE

Synonyms

None recorded

Vernacular names

Afrikaans (Namibia)	uintjie [5098]
Khukh (Namibia)	ǀhani-i [5083] [5098]
Otjiherero (Namibia)	ozeu [5083] [5098]

Partial distribution

Plant origin	Continent	Region	Botanical country
Native	Africa	East Tropical Africa	Tanzania [6544], Uganda [6544]
		South Tropical Africa	Zambia [5481], Zimbabwe [5419]
		Southern Africa	Botswana [5104] [5700], Cape Province [5104], Lesotho [5104], Namibia [5083] [5104] [5183], Natal [5104], Orange Free State [5104], Transvaal [5104]

ISO countries: South Africa [5104]

Descriptors

Category	Descriptors and states
DESCRIPTION	Herb [5104]; Perennial [5104] [6544]; Stoloniferous [6544]; Plant Height 0.05-0.45 m [5104]
CLIMATE	Marked Dry Season [5104]; Subtropical, Hot and Arid [5104]
SOILS	Limestone Parent Material [5689]; Shallow [6544]; Sandy [6544]; Seasonally Waterlogged [6544]; Loamy Sands [5689]
HABITAT	Dominant within Stands of Natural Vegetation [5689]; Grassland/Forb-Land [6544]; Hillsides/Slopes [5689]; Flats [5689]; Altitude 900-2225 m a.s.l. [5104] [6544]
PRODUCTION AND VALUE	Wild Plants Utilised [5098]; Traded Locally [5689]

FURTHER DATA SOURCES	Botanical Illustration [6544] [6556]; Additional References [5642]; Databases [5123]; Grid Map [5123]
SEPASAL DATASHEET STATUS	Taxon Recently Added from Literature [6040]
CHEMICAL ANALYSES	Unspecified Carbohydrates - 'roots' [5689]; Proteins - 'roots' [5689]

Uses

Major use	Use group	Specific uses
FOOD	'Roots'	bulbs/corms [1171] [2514]; bulbs/corms, raw [5098] [5689]; bulbs/corms, vegetable dishes [5098] [5689]; bulbs/corms, soups [5098]
ANIMAL FOOD	'Roots'	bulbs/corms, primates, forage [6128]; bulbs/corms, chickens, forage [5689]; tubers/tubercles, game birds, forage [5689]; tubers/tubercles, game mammals, forage [5689]

Picture

None recorded

Notes

DISTRIBUTION

East Africa:
Var. macrobulbus only recorded from the Central Region in Tanzania and var. palmatus (rare) only from the Arusha, Mpanda, Ufipa and Sumbawanga districts in Tanzania [6544] .
Namibia:
Owambo, Omaruru and Gobabis Districts [5183] .
Zimbabwe:
Var. macrobulbus and var. palmatus [5419] .

DESCRIPTION

Bulbs:
6-10 mm in diameter, with a few thin scales outside, thick, almost black scales in the middle and thinner, reddish brown scales inside [6544] .
Culms:
100-300 mm long and 5-12 mm thick, triangular, glabrous [6544] .
Height:
0.05-0.45 m [5104] .
Inflorescence:
A congested, dark brown to almost blackish (rarely pale) anthela of many, crowded spikelets, or rarely a more open anthela of short spikes with crowded spikelets [6544] .
Leaves:
Leaf blades 50-200 mm long and 2-6 mm wide, flat, rather thick and semi-fleshy, shriveling when dry, scabrid on margin at least above. Sheaths grey to light brown [6544] .
Lifeform:
Herb, cyperoid, geophyte, mesophyte [5104] .
Roots:
A short piece of rhizome connects stem and mother bulb [5098] .
Stolons:
0.50-100 mm long and 0.2-0.6 mm thick, with scattered or closely set 3-5 mm long reddish brown scales, sometimes splitting up into fibres [6544] .

IDENTIFICATION

Var. usitatus is recognized by its bulb, slender stolons and dense head of very dark spikelets. Var. macrobulbus differs only in its larger bulb (to 20 mm in diameter), more robust stem, and more lax inflorescence. Var. stuhlmannii differs from var. usitatus mainly in its more ample inflorescence with more involucral bracts and var. palmatus in its golden triangular inflorescence and slighter longer spikelets [6544] .

FOOD - 'ROOTS'

Bulbs/corms, vegetable dishes, raw:
Raw they are a bit bitter but when roasted they are good, looking similar to a pearl onion [5689] .
Bulbs, soups, vegetable dishes, raw:
The bulbs can be eaten raw, or roasted in embers, or else roasted, ground, and, with the addition of fat, made into soup [5098] .
Bulbs/corms:
Herd-boys, woman and children eat the bulbs in Lesotho (Ashton 1939) [1171] .

ANIMAL FOOD - 'ROOTS'

Bulbs/corms, chickens, forage:
Shops in Windhoek bought the bulbs from the local people and sold them as chicken feed, for which they are excellent [5689] .
Tubers, game mammals, game birds, forage:
The tubers are sought after by warthogs and guineafowl [5689] .
Bulbs/corms, primates, forage:
In South Africa baboon eat the bulbs [6128] .

CHEMICAL ANALYSES - MISCELLANEOUS

'Roots', proteins, carbohydrates:
The tubers contain 0.20% digestible protein and 51.09 kg of starch per 100 kg [5689] .

ALTITUDE

East Africa:
Var. usitatus at 1050-2100 m. Var. palmatus at 900-1400 m [6544] .
Southern Africa:
1000-2225 m [5104] .

GEOLOGY

Namibia:
On mica-schist, granite and sandstone hills and limestone areas [5689] .

SOILS

East Africa:
Often on shallow soil over rocks [6544] .

VEGETATION

Namibia:
They often form dense, gold-brown stands of up to 400 plants per square metre [5689] .

CYTOLOGY

For the genus x = 5, 8 (6, 7, 9, 13) (high aneuploids, high polyploidy) [5150] .

PROPAGATION FROM SEED

They reproduce by means of numerous seeds [5689] .

PROPAGATION - VEGETATIVE

They reproduce by means of numerous seeds as well as by tubers, each plant producing 3-7 tubers per year [5689] .

HARVESTING

Namibia:
The taste is better in the winter (harvesting period), but they are hard to find at that time, so they are usually collected when the aerial parts of the plant have dried but are still present [5689] .

YIELDS

Each plant produces 3-7 tubers per year. In good areas 40-60 zentner (1 zentner = 50 kg) of the tubers could be produced per hectare and even double or treble [5689] .

TRADE

Namibia:
Shops in Windhoek bought the bulbs from the local people and sold them as chicken feed, for which they are excellent [5689] .

PRODUCTION POTENTIAL

Cultivation of C. usitatus may be possible to supply food for pig breeding farms. All that would be required would be fencing to separate the culture from the insignificant surrounding vegetation, light harrowing to prevent runoff of rainwater, and weeding so that a pure stand of plants could be developed. It is only necessary to add a very small quantity of manure to the soil [5689] .

SUMMARY EVALUATION/POTENTIAL

Cultivation of C. usitatus for pig breeding may be a possibility [5689] .

ACKNOWLEDGEMENTS AND DATASHEET PROGRESS

Updated for southern Africa by E. Irish, checked by C. Mannheimer, SEPASAL Namibia, National Botanical Research Institute, February 2007 .

References

[1171] Fox, F.W. and Norwood Young, M.E. 1982. *Food from the veld. Edible wild plants of Southern Africa*. Johannesburg and Cape Town: Delta. 399p. En.
[2514] Peters, C.R., O'Brien, E.M. and Drummond, R.B. 1992. *Edible wild plants of sub-Saharan Africa*. Kew, U.K.: Royal Botanic Gardens, Kew. 239p. En.
[5083] Craven, P. and Kolberg, H. In prep. *Common names of Namibian plants*. Windhoek.
[5098] Von Koenen, E. 2001. *Medicinal, poisonous and edible plants in Namibia*. Windhoek: Klaus Hess Publishers. Edition Namibia, Vol. 4.
[5104] Germishuizen, G. and Meyer, N.L., eds. 2003. *Plants of southern Africa: an annotated checklist*. Strelitzia 14. Pretoria: National Botanical Institute.

[5123] National Herbarium of Namibia. Undated. *Specimen Database (SPMNDB)*. Windhoek: National Botanical Research Institute of Namibia.
[5150] Leistner, O.A., ed. 2000. *Seed plants of southern Africa: families and genera. Strelitzia 10*. Pretoria: National Botanical Institute.
[5183] Prodromus einer Flora von Suedwestafrika. 1966-1972. J. Cramer, Lehre. Ge.
[5419] Mapaura, A. and Timberlake, J., eds. 2004. *A checklist of Zimbabwean vascular plants. SABONET Report No. 33*. Pretoria and Harare: Southern African Botanical Diversity Network. iv, 148p.
[5481] Phiri, P.S.M. 2005. *A checklist of Zambian vascular plants. SABONET Report No. 32*. Pretoria: Southern African Botanical Diversity Network. 167p.
[5642] Ashton, E.H. 1939. Title unknown. *Trans. Roy. Soc. S. Afr*. 27: 159.
[5689] Dinter, K. 1912. *Die vegetabilischer Veldkost Deutsch-Suedwest-Afrikas*. Kurt Dinter (author). Ge.
[5700] Setshogo, M.P. 2005. *Preliminary checklist of the plants of Botswana. SABONET Report No. 37*. Pretoria and Gaborone: Southern African Botanical Diversity Network.
[6040] SEPASAL Namibia. 2005/2006. *National Botanical Research Institute of Namibia*. Windhoek: Namibia.
[6128] Peters, C. R. & Maguire, B. 1981. Wild plant foods of the Makapansgat area: a modern ecosystems analogue for Australopithecus africanus adaptations. *Journal of Human Evolution*. 10: 565-583.
[6544] Haines, R.W. and Lye K.A. 1983. *The sedges and rushes of East Africa*. Nairobi: East African History Society. En.
[6556] Clarke, C.B. 1909. *Illustrations of Cyperaceae*. London: Williams & Norgate.

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