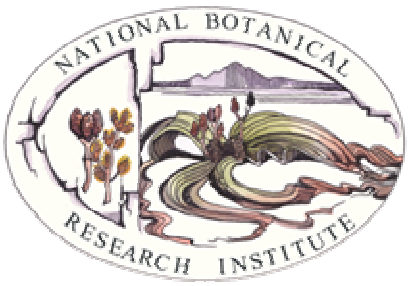

This report was generated from the SEPASAL database (www.kew.org/ceb/sepasal) in August 2007. This database is freely available to members of the public.

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which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources.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

Cyperus rotundus L.

Family: CYPERACEAE

Synonyms

Cyperus fenzelianus K.Schum., not of Steud

Vernacular names

Afrikaans (Namibia)	rooiuintjie [5083], uintjie [2136]
Afrikaans (South Africa)	rooiuintjie [5173], uintjie [1340]
Afrikaans (Southern Africa)	steentjie [1340]
English (Africa)	nut grass [1340], nut sedge [1340]
English (Namibia)	nut sedge [5083], nut-grass [2136]
English (South Africa)	Purple nut sedge [5173] [5303], nut-grass [5303]
Khukh (Namibia)	ǀares [5083]
Nama (Namibia)	!haren [2136], ǀarebes [2136]
Unknown	coco [1340], unitjekwerk [1340]
Unknown (Puerto Rico)	coqui [1340]

Partial distribution

Plant origin	Continent	Region	Botanical country
Native	Africa	South Tropical Africa	Mozambique [5480], Zambia [5481], Zimbabwe [5419]
		Southern Africa	Botswana [5104] [5700], Cape Province [5104], Lesotho [5550], Namibia [5104] [5149] [5183], Natal [5104], Swaziland [5104] [5452], Transvaal [5104]
	Asia-Temperate	Western Asia	Israel
Introduced	Southern America	Mesoamerica	
Status Unknown	Africa	Northeast Tropical Africa	Chad, Sudan

ISO countries: India , South Africa [5104]

Descriptors

Category	Descriptors and states
DESCRIPTION	Herb [5104]; Erect [5123]; Rhizomatous [5303]; Perennial [5104] [5303]; Fragrant - 'roots' [1340] [2136]; Plant Height <= 0.65 m [5104]
CLIMATE	Marked Dry Season [5104]; Subtropical, Hot and Arid [5104]
SOILS	Well Drained [5123]; Sometimes Waterlogged (frequency unknown) [5123] [5303]; Alluvial Soils [5123]
HABITAT	Lowland [5104]; Woodland [5123]; Anthropogenic Landscapes [5303]; Other Topographical Sites [5123]; Altitude 5-1370 m a.s.l. [5104]
PRODUCTION AND VALUE	Wild Plants Utilised [2136]
CONSTRAINTS	Weed [5303]
FURTHER DATA SOURCES	Additional References [5601] [6230] [6580] [6581] [6582] [6583] [6584] [6585]; Botanical Photograph [5303]; Databases [5123]; Grid Map [5123] [5303]
CHEMICAL ANALYSES	Biological Activity - 'roots' [1340]; Unspecified Lipids - 'roots' [1340]; Amino-Acids - 'roots' [1340]; Monosaccharides - 'roots' [1340]; Polysaccharides - unspecified parts; Sesquiterpene Alkaloids - 'roots' [1340]; Cyanogenic Glycosides - entire plant [1340]; Cyanogenic Glycosides - leaves [1340]; Cyanogenic Glycosides - inflorescences [1340]; Cyanogenic Glycosides - 'roots' [1340]

Uses

Major use	Use group	Specific uses
FOOD	Stems	vegetables; famine food
	'Roots'	root/tuber vegetables [1340] [2514]
FOOD ADDITIVES	'Roots'	spices
ANIMAL FOOD	'Roots'	tubers/tubercles, pigs, forage [1340]; roots, primates, forage [2514]
	Aerial Parts	unspecified aerial parts, mammals, grazing [5123]
MATERIALS	Unspecified Materials	stems, incense; perfumes [2136]; tubers/tubercles, perfumes [1340]
	Essential Oils	
NON-VERTEBRATE POISONS	Mollusca	'roots', death
	Arthropoda	tubers/tubercles, Insecta, repellent [1340]
MEDICINES	Unspecified Medicinal Disorders	stems, humans
	Circulatory System Disorders	tubers/tubercles, humans, heart, heart disease, poultices [1340]
	Digestive System Disorders	tubers/tubercles, humans, liver [1340]; tubers/tubercles, humans, indigestion [2136]
	Genitourinary System Disorders	humans, menstruation, emmenagogue [1340]; heartwood, humans, diuretic; tubers/tubercles, humans, diuretic [2136]; tubers/tubercles, humans, anaphrodisiac; tubers/tubercles, humans, anaphrodisiac, oral ingestion [2136]
	Infections/Infestations	tubers/tubercles, humans, helminth worm infections, internal applications [1340]; tubers/tubercles, humans, digestive system, infections [1340]; tubers/tubercles, humans, schistosomiasis [2136]

Injuries	humans, uterus, haemorrhages [1340]
Metabolic System Disorders	tubers/tubercles, humans, diaphoretic [1340]
Nervous System Disorders	tubers/tubercles, humans, stimulant [1340]
Nutritional Disorders	tubers/tubercles, humans, tonic [1340]
Pain	humans, head, anodyne [1340]; tubers/tubercles, humans, stomach, anodyne [2136]
Pregnancy/Birth/Puerpuerium Disorders	tubers/tubercles, humans, lactation, galactorrhoea, plasters [1340]; tubers/tubercles, humans, lactation, lactation stimulant, plasters [1340]
Respiratory System Disorders	tubers/tubercles, humans, coughs [2136]
Skin/Subcutaneous Cellular Tissue Disorders	tubers/tubercles, humans, ulcers, external applications [1340]; tubers/tubercles, humans, demulcent [1340]; tubers/tubercles, humans, astringent [1340]

Picture

None recorded

Notes

DISTRIBUTION

Namibia:
Etosha, Grootfontein and Outjo Districts [5183] .
South Africa:
Limpopo, Northwest, Gauteng, Mpumalanga, KwaZulu/Natal, Northern Cape, Western Cape and Eastern Cape Provinces. Subsp. tuberosus in KwaZulu/Natal [5104] .

DESCRIPTION

Height:
Subsp. rotundus 0.2-0.65 m. Subsp. tuberosus 0.3-0.6 m [5104] .
Height:
Up to 0.25 m [5303] .
Lifeform:
Cyperoid, mesophyte [5104] .
Roots:
The tubers have a camphorareous odour (Quisumbing 1951) [1340] .

IDENTIFICATION

Characterized by stems thickened at the base and red-brown inflorescences [5173] .

ANIMAL FOOD - 'ROOTS'

Roots, primates, forage:
Baboon eat the roots (Nagel 1973) [2514] .

MATERIALS - UNSPECIFIED MATERIALS

Perfumes, tubers:
In Asia the tubers are used for perfuming clothing [1340] .

MEDICINES - INJURIES

Humans, uterus, haemorrhages:
In Vietnam the plant is used for uterine haemorrhages [1340] .

MEDICINES - PREGNANCY/BIRTH/PUERPERIUM DISORDERS

Tubers, humans, birth, oral ingestion:
In Indo-China the tuber is administered to women during childbirth (Quisumbing 1951) [1340] .
Tubers, humans, lactation, lactation stimulant, plasters:
In the Indian Peninsula the fresh tuber is applied to the breast as a paste or warm plaster with galactagogic intent [1340] .

MEDICINES - SKIN/SUBCUTANEOUS CELLULAR TISSUE DISORDERS

Tubers, humans, ulcers, external applications:
In the Indian Peninsula the tuber is applied in a dry state to spreading ulcers (Nadkarni 1927) [1340] .

BIOLOGICAL ACTIVITY

The volatile oil has antibiotic properties (Radomir 1956) [1340] .

CHEMICAL ANALYSES - MISCELLANEOUS

Roots, carbohydrates:
The molasses extract from the tuber contains 41.7% d-glucose, 9.3% d-fructose and 4% of non-reducing sugars (Asenjo 1942) [1340] .
Roots, sesquiterpene alkaloids:
The crude volatile oil contains 35-54% of a sesquiterpene ketone alpha-cyperone C15H22O (McQuillin 1951) [1340] .
Roots, unspecified lipids, amino acids:
The fragrant tuber yields a volatile oil, a fixed oil and a wax and other amino acids substances associated with the formation of urinary calculi. The yield of the volatile oil is 0.45-0.94% (Hedge 1935) [1340] .

WEED PROBLEMS CAUSED

Chemical control:
Best reduction in yellow and purple nut sedge growth with pyrithiobac sodium was obtained with soil-incorporated treatments [6561] .
Chemical control:
Consistent control with pre-emergence applications to germinating tubers was obtained with a combined root and shoot zone exposure. Yellow nut sedge was more susceptible than purple nut sedge [6560] .
Chemical control:
Injection of the soil with D.D. and related substances completely destroys nut grass, but is very expensive. Spraying with 2,4-D is the most economical method of control but it cannot control the weed entirely. Where 2,4-D can't be used the nut grass may be controlled with herbicidal oils [6558] .
Cultivation methods:
C. rotundus may be controlled by thorough soil cultivation during the dry season. The method is effective if the plough cuts in below the deepest nut grass tubers and if the soil is perfectly dry [6558] .
South Africa:
The purple nut grass, which can only at tremendous cost be eradicated by mechanical cultivation during the growing season, is, however, much more sensitive to systematic herbicides than yellow nut grass [6558] .
South Africa:
This species is reputed to be one of the most formidable weeds in KwaZulu/Natal, and most of the world, spreading easily by means of small tubers. A second widespread form is a coastal weed, north of Durban [5303] .

CONSTRAINTS - MISCELLANEOUS

Dietetic experiments have shown that rats lose weight noticeably if more than 25% is included in the diet (Wu et al

1952) [1340] .

ALTITUDE

Altitude:
Subsp. rotundus 5-1370 m [5104] .

TOPOGRAPHY/SITES

Namibia:
Depressions [5123] .

GEOLOGY

Namibia:
Calcrete [5123] .

FLOWERING/FRUITING/SEED SET

Flowering, South Africa:
In Natal November to March [5303] .

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

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