This report was generated from the SEPASAL database ([www.kew.org/ceb/sepasal](http://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which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources.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) lares [5083] |
| Nama (Namibia) !haren [2136], larebes [2136] |
| Unknown coco [1340], unitjekwerk [1340] |
| Unknown (Puerto Rico) coqui [1340] |

**Partial distribution**

<table>
<thead>
<tr>
<th>Plant origin</th>
<th>Continent</th>
<th>Region</th>
<th>Botanical country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native</td>
<td>Africa</td>
<td>South Tropical Africa</td>
<td>Mozambique [5480], Zambia [5481], Zimbabwe [5419]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Southern Africa</td>
<td>Botswana [5104] [5700], Cape Province [5104], Lesotho [5550], Namibia [5104] [5149] [5183], Natal [5104], Swaziland [5104] [5452], Transvaal [5104]</td>
</tr>
<tr>
<td>Introduced</td>
<td>Southern America</td>
<td>Mesoamerica</td>
<td>Israel</td>
</tr>
<tr>
<td>Status Unknown</td>
<td>Africa</td>
<td>Northeast Tropical Africa</td>
<td>Chad, Sudan</td>
</tr>
</tbody>
</table>

**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 CONSTRAINTS | Wild Plants Utilised [2136] |
| 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 | 'roots', death |
| NON-VERTEBRATE POISONS | 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, helmynth 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/Puerperium 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 camphoraceous 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
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].

ACKNOWLEDGEMENTS AND DATASHEET PROGRESS

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

References
