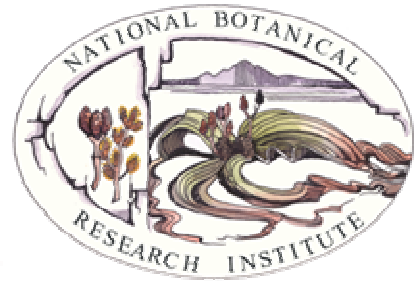


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SEPASAL is a database and enquiry service about useful "wild" and semi-domesticated plants of tropical and subtropical drylands, developed and maintained at the Royal Botanic Gardens, Kew. "Useful" includes plants which humans eat, use as medicine, 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which has been updating the information on Namibian species from Namibian and southern African literature and unpublished sources.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

New query

Edit query

View query results

 *Display help*In names list include: synonyms vernacular names and display: 10 names per page*Your query found 1 taxon***Imperata cylindrica (L.)Raeusch. [1808]**

Family: POACEAE

Synonyms

None recorded

Vernacular names

Afrikaans (Namibia)	donsgras [2259] [5115], lalang [5098]
Afrikaans (South Africa)	Palinggras [2259], Susanke [2259], Sygras [2259], donsgras [2259] [5117], silveraargras [2259]
Afrikaans (Southern Africa)	Silveraargras [2259], beddinggras [1171], donsgras [1171] [2182], lalanggras [1171], palinggras [1171], sygras [1171] [2182]
Changama (Mozambique)	Mutende [2259]
Chope (Mozambique)	Ihuchué [2259]
English	spear grass [6658]
English (Namibia)	bedding grass [5098] [5115], lalang [2259], silver spike [2259]
English (South Africa)	beddinggras [2259], cottonwool grass [2259] [5117], beady grass [2259], lalang grass [2259], ramsammy grass [5119], river farm grass [2259], river grass [2259], silky grass [2259], silver spike [2259]
English (Southern Africa)	cat tail [1171], cottonwool grass [1171] [2182], silverspike [2182] [2259]
English (U.S.A.)	cogon grass [2259]
English (Zimbabwe)	silver spike [2259]
German (Namibia)	Alang-Alang [2259] [5083] [5098]
Jul'hoan (Namibia)	djoto-oaβa [5083] [5115], llxâi [5083] [5098] [5115]
Khoekhoegowab (Namibia)	djoto-oaβa [5083]
Malay	alang-alang [2259]
Ronga (Mozambique)	Lichué [2259]
Sotho (South Africa)	Kxokwane [2259], Mohlabala-lerumo [2259], Mohlorumo [2259], Mothlorumo [2259], Thorumo [2259]
Sotho (South Africa) [inflorescence]	Qheme [2259]
Sotho (Southern Africa)	mohlabalerumo [1171], mohlabarumo [1171]
Thimbukushu (Namibia)	ruhenga [5083] [5115]
Unspecified language	dab [1321]
Zulu (South Africa)	umTente [2259]

Zulu (Southern Africa) umthente [[1171](#)]

Distribution

Plant origin	Continent	Region	Botanical country	
Native	Africa	East Tropical Africa	Kenya [1362] [2259], Tanzania [1362] [2259] [6573], Uganda [1362] [2259] [6573]	
		Northern Africa	Egypt [1617]	
		South Tropical Africa	Angola [1362] [2259] [5126], Mozambique [3] [2259] [5480], Zambia [3] [2259] [5481], Zimbabwe [3] [2259] [5125]	
		Southern Africa	Botswana [3] [2259] [5104] [5186], Cape Province [2259] [5104] [5117], Caprivi Strip [2182] [2259] [5115], Lesotho [2259] [5117] [5550], Namibia [1362] [2182] [5115], Natal [2259] [5104] [5117], Orange Free State [2259] [5104] [5117], Swaziland [2259] [5104] [5117] [5452], Transvaal [2259] [5104] [5117]	
		West Tropical Africa	Benin [1360], Burkina [1360], Ghana [1360], Guinea [1360], Ivory Coast [1360], Liberia [1360], Mali [1360], Nigeria [1360], Senegal [1360], Sierre Leone [1360], The Gambia [1360], Togo [1360]	
		West-Central Tropical Africa	Cameroon [1360], Zaire [2259]	
		Western Indian Ocean	Madagascar [2255]	
		Western Asia	Afghanistan [1359] [1360], Iran [1359] [1360], Iraq [1359] [1360], Israel [2255]	
		Asia-Temperate	Indian Subcontinent	Assam [2255], Sri Lanka [2255], West Bengal [2255]
		Asia-Tropical	Australia	New South Wales [1808], Northern Territory [1808], Queensland [1808], South Australia [1808], Tasmania [1808], Victoria [1808], Western Australia [1808]
	Australasia	Southeastern Europe	Albania [2255], Greece [1359], Italy [2255], Sicilia [2255], Yugoslavia [2255]	
	Europe			

		Southwestern Europe	Baleares [2255], Corse [2255], France [1359], Portugal [1359], Sardegna [2255], Spain [1359]		
Status Unknown	Africa	Macaronesia	Canary Is [2255]		
		Northeast Tropical Africa	Ethiopia [2255], Socotra [2255], Sudan [623]		
		Northern Africa	Algeria [1359], Libya [1359], Morocco [1359], Tunisia [1359]		
		South Tropical Africa	Malawi [3] [2259]		
		West Tropical Africa	Niger [2255]		
		West-Central Tropical Africa	Burundi [2255], Central African Republic [2255], Congo [2259], Equatorial Guinea [2255], Gabon [2259], Rwanda [2255]		
		Western Indian Ocean	Comoros [2255], Mauritius [2255]		
		Asia-Temperate		Arabian Peninsula	North Yemen [2255], Oman [2255], Saudi Arabia [2255]
				Caucasus	Armeniya [2255], Azerbaydzhan [2255], Gruzuya [2255]
				China	Anhui [2255], Fujian [2255], Guangdong [2255], Guizhou [2255], Hong Kong [2255], Jiangsu [2255], Jiangxi [2255], Shandong [2255], Sichuan [2255], Yunnan [2255], Zhejiang [2255]
Eastern Asia	Japan [2255], North Korea [2255], South Korea [2255], Taiwan [2255]				
Soviet Middle Asia	Kazakhstan [2255]				
Western Asia	Cyprus [1359], Jordan [1359], Palestine [1359], Syria [1359]				
Asia-Tropical				Indian Subcontinent	Bangladesh [2255], Himachal Pradesh [2255], Jammu-Kashmir [2255], Karnataka [2255], Maharashtra [2255], Nepal [2255], Orissa [2255], Pakistan [2255], Punjab [2255], Sikkim [2255], Tamil Nadu [2255], Uttar Pradesh [2255]
				Indo-China	Burma [2255], Thailand [2255], Vietnam [2255]
				Malesia	Borneo [2255], Jawa

			[2255], Moluccas [2255], Papua New Guinea [2255], Peninsular Malaysia [2255], Philippines [2255], Sarawak [2255], Sumatera [2255]
	Europe	Southeastern Europe	Kriti [1359]
	Pacific	Southwestern Pacific	Fiji [2255], New Caledonia [2255], Western Samoa [2255]

ISO countries: Australia [2255] , Chile [3] [1362] , India [2255] , Malaysia [2255] , USSR [1360] , Turkey [1359] , South Africa [1362] [2259] [5104] [5117]

Descriptors

Category	Descriptors and states
DESCRIPTION	Herb [2255]; Tussock Forming/Tufted/Caespitose [3] [6573]; Terrestrial [2182] [5117]; Rhizomatous [3] [1360] [2182] [2259] [5117] [6573] [6658]; Perennial [3] [2259] [5115] [5117] [6573] [6658]; Plant Height 0-1.2 m [1362] [2182] [5104] [5117]
CLIMATE	Tropical Summer Rains [3] [2259]; Subtropical, Hot and Arid [5115] [5119]; Warm Temperate Humid [3] [2259]
SOILS	Sometimes Waterlogged (frequency unknown) [5117]; Saline [1591] [2255]; Poorly Drained [5117]; Sandy [1591]; Seasonally Waterlogged [3] [2182] [6573]
HABITAT	Coastal Regions [1591]; Forest [6573]; Forms Monospecific Stands [2259] [5117]; Non-Coastal Regions; Grassland/Forb-Land [5117]; Wooded Grassland [5117]; Hillsides/Slopes [6573]; Watercourses [3] [2259] [5115] [5117]; Lakes/Ponds/Pools [1591]; Anthropogenic Landscapes [3] [2259]; Croplands [3] [1360] [2259]; Vlei/Dambo/Seasonally Flooded Grassland [2182] [2259] [5115] [5117]; Plains [6573]; Altitude 0-2100 m a.s.l. [3] [1362] [5104] [6573]
PHYSIOLOGY	Light Demanding [2259]; Fire Resistant/Regenerates After Fire [2259] [5117]
PRODUCTION AND VALUE	Used in Manufacturing Industry [1321]
CONSTRAINTS	Weed [3] [2182] [5117]; Agricultural Weed [3] [1360] [1362] [2259] [6573] [6658]; Rangeland/Pasture Weed [6658]; Aquatic Weed [6573]
FURTHER DATA SOURCES	Botanical Illustration [3] [1171] [1362] [2182] [2259]; Additional References [1147] [5308] [5312] [5658] [5659]; Regional Distribution Map [2259]; Botanical Photograph [2182] [5117]; Habit Illustration/Photograph [5117]; Grid Map [2182] [5115] [5117]
SEPASAL DATASHEET STATUS	Nomenclature Checked
CHEMICAL ANALYSES	Other Analyses - unspecified parts [1340]

Uses

Major use	Use group	Specific uses
FOOD	'Roots'	roots, raw [1171] [2259] [5117]
ANIMAL FOOD	Aerial Parts	unspecified aerial parts, grazing [2259] [5117] [6573]; unspecified aerial parts, game mammals, grazing [5117]; unspecified aerial parts, forage [2259]
MATERIALS	Fibres	unspecified aerial parts, thatch [2259] [5117] [6573]; stems,

		cord/string/twine, ropes [2255]; stems, paper [2255]; stems, packing/stuffing/filling [2255]; stems, cosmetics [5101] [5115]; stems, 'jewellery'/personal adornment [5101] [5115]; stems, ropes [939]; leaves, ropes [939]; paper [1137] [1321]; bags [1137]; seeds, packing/stuffing/filling, pillows [1137]; baskets [1137]
MEDICINES	Abnormalities	humans, oedemas [1340]
	Blood System Disorders	roots, humans, other blood system disorders/effects [1340]; inflorescences, humans, other blood system disorders/effects [1340]
	Digestive System Disorders	humans, other digestive system disorders/effects [1340]; humans, nausea [1340]; roots, humans, nausea [5098]; roots, humans, other digestive system disorders/effects [5098]; roots, humans, indigestion [1340]
	Genitourinary System Disorders	roots, humans, urination, diuretic [1340]; inflorescences, humans, urination, diuretic [1340]; humans, haematuria [1340]; roots, humans, haematuria [5098]
	Infections/Infestations	roots, humans, respiratory system, colds [1340]; humans, fever [1340]
	Injuries	roots, humans, haemostatic [1340]; inflorescences, humans, haemostatic [1340]; humans, nose; roots, humans, nose
	Nutritional Disorders	roots, humans, tonic [1340]; inflorescences, humans, tonic [1340]; roots, humans, restorative [1340]; inflorescences, humans, restorative [1340]; roots, humans, other nutritional disorders/effects [1340]; inflorescences, humans, other nutritional disorders/effects [1340]; humans, other nutritional disorders/effects
	Respiratory System Disorders	humans, asthma [1340]; roots, humans, asthma [5098]; roots, humans, other respiratory system disorders/effects [1340]; roots, humans, nose [5098]; humans, nose [1340]
ENVIRONMENTAL USES	Unspecified Environmental Uses	saline soils [2255]
	Erosion Control	contour strips/ridge/bund plants, eroded land [5117]

Picture

None recorded

Notes

NOMENCLATURE/TAXONOMY

Name derivation:

Named for Ferrante Imperato, a Neopolitan botanist of the sixteenth century. 'Cylindrica' Latin for cylindrical, possibly descriptive of the shape of the flowerhead [2259] .

South tropical Africa:

A number of geographical races can be discerned, but they overlap too much to justify formal taxonomic recognition [3] .

Var. *cylindrica*, var. *africana* (Anderson) C.E. Hubb and var. *major* (Nees) C.E.Hubb exist [1360] .

DISTRIBUTION

Var. africana:

Uganda, western Kenya, Tanzania, Zaire, Angola, Zambia, Zimbabwe, Malawi, Mozambique, Namibia, Transvaal, Swaziland, Natal, Lesotho, Free State, and Cape province. Var. *major*: appears to be limited to the eastern coastal belt from Kenya to the eastern Cape [2259] .

Worldwide:

Extends through the Old World tropics and northwards to the Mediterranean region and SW Asia; also in Chile [3] [1362] .

Worldwide:

Southern Africa, Mediterranean region and the Old World tropics [5115] .

Malay Peninsular, India, China, Malaysia, New Guinea, Australia (var. major) publication still in press by Clayton [2255] .

Nigeria, Iraq, Iran, Afghanistan, USSR, Mediterranean (var. cylindrica) [1360] .

Var. africana (Anderss.) C.E. Hubbard found in Senegal, Gambia, Mali, Ghana, Libya, Ivory Coast, Upper Volta, Togo, Dahomey, Nigeria, Madagascar [1360] .

West Tropical Africa:

Two varieties (var. cylindrica and var. africana) are found in West Tropical Africa. A third variety (var. major) extends from eastern tropical Africa, through tropical Asia, to Australia. It is much more aggressively rhizomatous than the other varieties and is a serious pest of agricultural land [1360] .

From Uganda, Tanzania, tropical Africa extending to the Mediterranean and the Middle East [6573] .

DESCRIPTION

Habit:

A colony-forming perennial grass spreading by means of strong rhizomes, which make a tangle of underground stems, forming pure stands, with unbranched culms up to 1.2 m tall [2259] [5117] .

Inflorescence:

A dense, cylindrical, spikelike panicle up to 250 mm long. Spikelets up to 6 mm long, in pairs, pedicellate and covered with long, silky white hairs [5117] .

Leaves:

Leaf blade up to 12 mm wide, hard, with a distinct midrib and a hard, sharp tip. Leaf sheath round and smooth. Ligule an inconspicuous membrane with scattered hairs [5117] .

Growth form:

Tufted [6573] .

IDENTIFICATION

Southern Africa:

Easy to identify because of the distinctive shape (like a cylindrical plume) and silky white or cream colour of the flowerhead; the hard, rigid, spear-like leaves with their cutting margins; the favoured habitat i.e. moist places such as vleis, river banks, irrigated and cultivated lands and because it grows in pure stands. It is difficult to distinguish the two closely related varieties that occur in Southern Africa, namely var. africana and var. major [2259] .

Three varieties are commonly recognized:

Var. cylindrica, leaf-blades rolled. Mediterranean and Middle East; Var. africana, leaf-blades flat, spikelets 3-5.7 mm long (mean 4.5). Africa; Var. major, leaf-blades flat, spikelets 2.5-4.5 mm long (mean 3.3). Tropical Africa [1362] .

FOOD - 'ROOTS'

Roots, raw:

In Lesotho rhizomes are eaten raw by herders [1171] [2259] [5117] .

ANIMAL FOOD

The grass has coarse unpalatable leaves [6658] .

ANIMAL FOOD - AERIAL PARTS

Unspecified aerial parts, forage:

Generally regarded as poor forage value in Africa, except along the Mozambique coastal areas, where it remains green throughout the year [2259] .

Unspecified aerial parts, game mammals, grazing:

Preferred by reedbuck [5117] .

Unspecified aerial parts, grazing:

Poorly utilized by grazers owing to the hardness of its leaves [5117] .

Unspecified aerial parts, grazing:

Var. major gives good grazing in the East [2259] .

Unspecified aerial parts, grazing:

Grazed to a limited extent when young, soon becoming tough and unpalatable [6573] .

MATERIALS - FIBRES

Cosmetics, stems:

In Namibia the culms are ground and the powder is used as a cosmetic [5101] .

Jewellery/personal adornment, stems:

In Namibia the culms can be cut into short pieces and strung for decorations [5101] .

Unspecified aerial parts, thatch:

Used as a thatching grass in Mozambique [2259] [5117] .

Paper:

Used extensively in paper industry [1321] .

Ropes, stems, leaves:

Fibrous stem and leaves moistened and twisted into rope which is very durable in dry climate [939] .

Stuffing, pillows, seeds:

Seed flumes used for stuffing pillows [1137] .

Thatch, unspecified aerial parts:

Used for thatching [6573] .

MEDICINES - ABNORMALITIES

Humans, oedemas:

It has been prescribed for dropsy due to weakness [1340] .

MEDICINES - BLOOD SYSTEM DISORDERS

Roots, inflorescences, humans, other blood system disorders:

In China the root and inflorescence are used as a haemostatic, astringent and antifebrile as well as being credited with antivenous properties [1340] .

MEDICINES - DIGESTIVE SYSTEM DISORDERS

Humans, other digestive system disorders:

It has been prescribed for jaundice [1340] .

Roots, humans, indigestion:

In South Africa the root is used as an indigestion remedy (Githens 1949) [1340] .

Roots, humans, other digestive system disorders:

In Namibia the root is used for jaundice and digestive disturbances [5098] .

MEDICINES - GENITOURINARY SYSTEM DISORDERS

Roots, inflorescences, humans, urination, diuretic:

In China the root and inflorescence are used as a diuretic (Dragendorff 1898) [1340] .

MEDICINES - INFECTIONS/INFESTATIONS

Roots, humans, respiratory system, colds:

The Southern Sotho use the root in making a medicine for chest colds in children (Phillips 1917) [1340] .

MEDICINES - INJURIES

Roots, inflorescences, humans, haemostatic:

In China the roots and inflorescence are used as a haemostatic [1340] .

MEDICINES - NUTRITIONAL DISORDERS

Roots, inflorescences, humans, tonic, restorative:

In China the root and inflorescence are used as a restorative and tonic [1340] .

MEDICINES - RESPIRATORY SYSTEM DISORDERS

Humans, nose bleeding:

It has been prescribed for nose bleeding [1340] .

Root, humans, nose bleeding:

In Namibia the root is used for epistaxis [5098] .

Roots, humans, other respiratory disorders:

The Zulu regard the root as a specific for hiccup (Bryant 1909) [1340] .

ENVIRONMENTAL USES - EROSION CONTROL

Contour strips/ridge/bund plants, eroded land:

Important in erosion control, particularly on riverbanks [5117] .

CHEMICAL ANALYSES - MISCELLANEOUS

Unspecified parts, anemonin:

Anemonin has been isolated from the plant [1340] .

Unspecified parts, antipyretic:

Investigations shows that this plant has no antipyretic effects (Hebert 1896) [1340] .

ANATOMY

Cumulative halophyte accumulates salts throughout the growing season until they reach a toxic level and the plant dies [1591] .

WEED PROBLEMS CAUSED

Central Africa:

A serious weed in irrigated lands and in coffee and other plantations in high rainfall areas of Central Africa [2259] .

Control methods:

In southern Africa it can be "shaded out" by trees only if a dense canopy is maintained. Constant and close mowing is said to suppress growth [2259] .

South tropical Africa:

Aggressive weed of disturbed and cultivated places [3] .

Southern Africa:

Difficult to control in fields because of its vigorously growing rhizomes [2182] [5117] .

A weed in irrigated land [6573] .

It has a spreading system of deeply penetrating rhizomes which makes it difficult to control except by a series of deep cultivations. Because it often invades arable land after several years of cultivation it can be serious weed in the establishment of ley. It tends to spread into paddocks from the fence lines [6658] .

Weed of cultivation [6573] .

CONSTRAINTS - MISCELLANEOUS

Poorly utilized by grazers owing to the hardness of its leaves [5117] .

Southern Africa:

Extremely difficult to eradicate because of the mat of tough creeping rhizomes, which penetrate deep into the soil. New plants grow easily from the smallest pieces left after cultivation [2182] [2259] .

ALTITUDE

South tropical Africa:

0-2000 m [3] .

Southern Africa:

4-2100 m [5104] .

Tropical East Africa:

0-2100 m [1362] .

0-1850 m a.s.l. [6573] .

TOPOGRAPHY/SITES

Southern Africa:

Favours moist areas such as vleis, riverbanks, road drains and old irrigated lands [2182] [2259] [5115] [5117] .

Coastal and inland salt marshes. Covers sandy bars or terraces around lakes [1591] .

Open spaces subject to cultivation and disturbance (Clayton, undated in press) [2255] .

Restricted to marshy places [1322] .

SOILS

Water soluble salts at 0-10 cm is 44.11%, at 10-40 cm is 2%, chloride at 0-10 cm is 25.0%, sulphates at 0-10 cm is 8.3% [1591] .

VEGETATION

South Africa:

Grassland, savanna and fynbos [5117] .

ENVIRONMENTAL FACTORS - MISCELLANEOUS

South Africa:

Is classified as mostly Increaser I i.e. a species that dominates in poor veld and increases with understocking or selective grazing [5117] .

Southern Africa:

Can be "shaded out" by trees only if a dense canopy is maintained. Constant and close mowing is said to suppress growth [2259] .

FLOWERING/FRUITING/SEED SET

Flowering, southern Africa:

August to June [2182] [5117] .

Flowering, fruiting:

August-October [1322] .

CYTOLOGY

For the genus $x = 5, 10$ (polyploidy) [5150] .

$2n=20$ [1137] .

CULTIVATION

America, East:

The species has been cultivated as a pasture in America and var. major gives good grazing in the east [2259] .

SEED/GENE BANK SOURCES

Seed available for exchange to institutes and botanic gardens from Plant introduction officer, Institute for Agriculture and Applied Biology, Ben Gurion University of Negev, P.O.B. 1025, Beer Sheva 84110, Israel .

ACKNOWLEDGEMENTS AND DATASHEET PROGRESS

Updated for southern Africa by E. Irish; checked by A. Jarvis; Sepasal Namibia, National Botanical Research Institute, May 2005 .

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