

FULL ACCOUNT FOR: Cynodon dactylon

Cynodon dactylon 简体中文 正體中文

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Cyperales	Poaceae

pelo de conejo (Spanish), zacate de Bermuda (Spanish), pata de perdiz Common name

> (Spanish), grama rastera (Spanish), pasto de las Bermudas (Spanish), gramilla brava (Spanish), gramilla (Spanish), pasto de gallina (Spanish), gramilla Italiana (Spanish), paja de la virgen (Spanish), pasto Argentina (Spanish), palo delgado (Spanish), zacate de aguijilla (Spanish), zacate de gallina (Spanish), zacate de conejo (Spanish), grama brava (Spanish), zacate gallina (Spanish),

chiendent (French, New Caledonia)

Capriola dactylon, (L.) Kuntze [Cynodon dactylon var. dactylon] Synonym

Cynodon coursii, A. Camus [Cynodon dactylon var. coursii]

Cynodon dactylon , var. densus Hurcombe

Cynodon polevansii, Stent [Cynodon dactylon var. polevansii] Digitaria stolonifera, Schrad. [Cynodon dactylon var. dactylon]

Panicum dactylon, L. [Cynodon dactylon var. dactylon]

Cynodon aristiglumis, Caro & Snchez Cynodon incompletus, auct. non Nees

**Similar species** 

Cynodon dactylon is adapted to survive both extended dry periods and **Summary** 

flooding conditions. It is a potential agricultural weed and a commonly used as

a lawn grass.



view this species on IUCN Red List

## **Species Description**

A short-lived, prostrate, fine-leaved perennial grass that spreads by strong, flat stolons and scaly rhizomes to form a dense turf; stolons root readily at the nodes; culms erect or ascending, 5 to 45 cm (rarely to 90 or even 130 cm) tall, wiry, smooth, sometimes reddish, leaf sheaths up to 15 mm long, shorter than internodes, smooth; liqule a conspicuous ring of white hairs; blades 2 to 16 cm long, 3 to 5 mm wide, smooth or hairy on upper surface; inflorescence of three to seven sometimes purplish spikes in one whorl, in a fingerlike arrangement (digitately), 3 to 10 cm long, or in robust forms spikes up to 10, sometimes in two whorls; spikelets 2 to 3 mm long, in two rows tightly appressed to one side of the rachis; lemma boat-shaped, acute with fringe of hairs on the keel, longer than the glume; seed (grain) very small, 1.5 mm long, oval, straw-colored to orange-red, free within the lemma and palea\" (Holm et al. 1977, in PIER 2008). \n

Creeping perennial grass, rooting at the nodes either on the surface of the ground (stolons) or underground (white rhizomes); culms slightly flattened, prostrate or somewhat ascending or erect; inflorescence purplish, digitate; leaf-blades short, usually 3 to 10 cm long, 3 to 6 cm wide, the edges rough. Spikes 2 to 6, often 5 or 4, 2.5 to 7 cm long. Spikelets imbricate, sessile, up to 3 mm long. Lemma longer than either glume (Stone 1970, in PIER 2008), \n



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### **Notes**

Sub-ordinate taxa include: Cynodon dactylon var. afghanicus, C. dactylon var. aridus, C. dactylon var. coursii, . dactylon var. dactylon, C. dactylon var. elegans and Cynodon dactylon var. polevansii (USDA-ARS 2004). For more common names please see: Multilingual Multiscript Plant Name Database. 2005. Sorting Cynodon names.

#### Uses

Used for environmental purposes (erosion control; lawn/turf), animal food (fodder; forage) and medicines (USDA-ARS 2004). Frequently used for lawns and pastures (Wiggins & Porter 1971, in PIER 2008).

## **Habitat Description**

Cynodon dactylon is a warm-season grass which grows slowly in cold weather, in shade or in dry soils. Grows in a range of soils from sand to heavy clay to poor soil; thrives best in medium to heavy moist and well drained soil. Grows in either acid or alkaline conditions and survives floods and drought (through regrowth from underground rhizomes). May be found in the tropics in areas with 600 to 1800 mm of annual rainfall. May be found in arid regions thriving along rivers and in irrigated areas (Holm et al. 1977, in PIER 2008). Found in lower altitudes throughout warm regions of the world (Wiggins & Porter 1971, in PIER 2008). \n Cultivated in Hawaii; grows along roadsides and in exposed rocky or sandy sites up to 2270 meters in altitude (Wagner et al. 1999, in PIER 2008). Widespread and common in Fiji especially near roadsides, riversides and hillsides to an altitude of 850 meters. Sometimes forms dense mats on the upper parts of beaches and near mangrove swamps (Smith 1979, in PIER 2008). Cultivated on lawns in Tonga (Yuncker 1959, in PIER 2008). A common roadside, lawn grass and plantation weed in New Guinea found to an altitude of at least 1800 meters (Henty & Pritchard 1975, in PIER 2008).

### Reproduction

Bermuda grass reproduces by seed. It may propagate by seed or by vegetative fragmentation via runners and rhizomes. Warm moist conditions promote the production of up to 230 seeds per panicle (Perez & Labrada 1985). Seeds germinate at temperatures above 20°C (Burton Undated, in PIER 2008) and germination takes place within the next two weeks. The complete cycle from germination to seed production takes around four months (Perez & Labrada 1985, in PIER 2008).\n

## **General Impacts**

In a <u>risk assessment</u> prepared for Australia *C. dactylon* scored a total of 5. It is highly suited to the Australian climates and is native or naturalised in areas with extended dry periods. It is an agricultural weed, toxic to animals and a known host of pathogens and pests (PIER 2001).

## **Management Info**

<u>Physical</u>: Small patches can be dug out. Removal of all rhizomes and stolons is necessary. Solarisation by use of plastic sheets is possible in some climates.

<u>Chemical</u>: Young plants are effectively controlled by applying paraquat, or glyphosate. Applications should occur during spring or autumn when rhizomes are growing (Weber 2003, in PIER 2008). \n

## **Principal source:**

**Compiler:** IUCN SSC Invasive Species Specialist Group (ISSG) with support from the EU-funded South Atlantic Invasive Species project, coordinated by the Royal Society for the Protection of Birds (RSPB)

## **Review:**

**Pubblication date: 2010-08-16** 

## **ALIEN RANGE**



FULL ACCOUNT FOR: Cynodon dactylon

[2] AMERICAN SAMOA

[1] BERMUDA

[1] CAMBODIA

[1] CHRISTMAS ISLAND

[4] ECUADOR

[7] FIJI

[1] GUAM

[1] INDONESIA

[1] MALAYSIA

[1] MAURITIUS

[8] MICRONESIA, FEDERATED STATES OF

[7] NEW CALEDONIA

[1] NICARAGUA

[9] NORTHERN MARIANA ISLANDS

[1] PERU

[1] PITCAIRN

[1] SEYCHELLES

[1] SOLOMON ISLANDS

[1] TONGA

[2] UNITED STATES MINOR OUTLYING ISLANDS

[3] AUSTRALIA

**[2]** BRITISH INDIAN OCEAN TERRITORY

[1] CHILE

[1] COLOMBIA

[1] EL SALVADOR

[11] FRENCH POLYNESIA

[1] GUATEMALA

[6] KIRIBATI

[3] MARSHALL ISLANDS

[1] MEXICO

[1] NAURU

[2] NEW ZEALAND

[1] NIUE

[7] PALAU

[1] PHILIPPINES

[3] SAINT HELENA

[1] SINGAPORE

[1] THAILAND

[13] UNITED STATES

[1] VIET NAM

### **BIBLIOGRAPHY**

11 references found for Cynodon dactylon

### **Managment information**

Hawaiian Ecosystems at Risk project (HEAR). 2008. Plants of Hawaii: Poaceae > Paspalum scrobiculatum Ricegrass

Summary: Images.

Available from: http://www.hear.org/starr/plants/images/species/?q=paspalum+scrobiculatum [Accessed 10 December 2008] <a href="UCN/SSC Invasive Species Specialist Group">UCN/SSC Invasive Species Specialist Group</a> (ISSG)., 2010. A Compilation of Information Sources for Conservation Managers.

**Summary:** This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

## **General information**

Coral Islands of the Western Indian Ocean, 1970. D.R. Stoddart (ed.) Coral Islands of the Western Indian Ocean, Atoll Research Bulletin 136 Issued by The Smithsonian Institution Washington, D . C . , U.S .A. August 28, 1970

Summary: Available from: http://si-pddr.si.edu/dspace/bitstream/10088/6071/1/00136x.pdf [Accessed 10 December 2008]

<u>Duffey, Eric. 1964. The terrestrial ecology of Ascention Island, The Journel of Applied Ecology 1 (2)</u>

Summary: Available from: http://www.seaturtle.org/PDF/Duffey\_1964\_AppEcol.pdf [Accessed 25 October 2009]

Gray, Alan, Tara Pelembe and Stedson Stroud. 2005. The conservation of the endemic vascular flora of Ascension Island and threats from alien species, Oryx 39 (4)

Summary: Available from:

 $\label{lower_http://journals.cambridge.org/download.php?file=%2FORX%2FORX39\_04\%2FS0030605305001092a.pdf\&code=a496b9c9fa1ba28f5d1724b7\ 6fbc7feb\ [Accessed\ 10\ December\ 2008]$ 

ITIS (Integrated Taxonomic Information System), 2008. Online Database Cynodon dactylon (L.) Pers.

**Summary:** An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals. Available from:

http://www.itis.gov/servlet/SingleRpt/SingleRpt?search topic=TSN&search value=41619 [Accessed 10 December 2008]

Pacific Island Ecosystems at Risk (PIER). 2001. Cynodon dactylon (L.) Pers. Poaceae Risk Assessment

Summary: Available from: http://www.hear.org/Pier/wra/australia/cydac-wra.htm [Accessed 10 December 2008]

Pacific Island Ecosystems at Risk (PIER). 2008. Cynodon dactylon (L.) Pers. Poaceae Species summary

**Summary:** Available from: http://www.hear.org/Pier/species/cynodon\_dactylon.htm [Accessed 10 December 2008]

Topp, J.M.W. 1988. An Annotated Check List Of The Flora of Diego Garcia. British Ocean Territory, *Atoll Research Bulletin 313* Issued by National Museum of Natural History Smithsonian Institution Washington D.C. USA.

Summary: Available from: http://www.botany.hawaii.edu/faculty/duffy/arb/312-320/313.pdf [Accessed 10 December 2008]

United States Department of Agriculture - Agricultural Research Service (USDA-ARS). 2004. Taxon: Cynodon dactylon (L.) Pers. National Genetic Resources Program. Germplasm Resources Information Network - (GRIN) [Online Database]. National Germplasm Resources Laboratory, Beltsville, Maryland.

**Summary:** Available from: http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?12848 [Accessed 10 December 2008] Global Invasive Species Database (GISD) 2024. Species profile *Cynodon dactylon*. Available from: https://www.iucngisd.org/gisd/species.php?sc=202 [Accessed 03 May 2024]



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United States Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS). 2008. Cynodon dactylon (L.) Pers. Bermudagrass The PLANTS Database. National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Summary: Available from: http://plants.usda.gov/java/profile?symbol=CYDA [Accessed 10 December 2008]