

# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Phoenix canariensis

Phoenix canariensis 简体中文 正體中文

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Liliopsida	Arecales	Arecaceae

Canary date palm (English), Canary Island date palm (English), phoenix palm Common name

(English), dattier des Canaries (French)

**Synonym** 

**Similar species** 

**Summary** Phoenix canariensis is a palm tree native and endemic to the Canary Islands.

It is very hardy and can establish in a variety of soil conditions. It its younger stages Phoenix canariensis fronds can be harmful to humans and animals, due to sharp barbs that can cut off and embed themselves under the skin, eventually causing infection. Some individuals are also known to be allergic to

the plant. Phoenix canariensis has also been documented as displacing native

species and altering habitat.

view this species on IUCN Red List

### **Species Description**

Gilman and Watson (1994) describe P. canariensis as a large, stately palm that often reaches a size too massive for most residential landscapes but is very slow-growing and will take a considerable amount of time to reach its 15 to 18 metre height. P. canariensis can be identified by its single, upright, thick trunk topped with a crown of 2.5 to 4.5 metres long. It puts out stiff leaves with extremely sharp spines at their bases. The stalks of inconspicuous flowers are replaced with clusters of one-inch-diameter, orange-yellow, date-like, ornamental fruits, which ripen in early summer. The trunk can reach a diameter of 1.2 metres and is covered with an attractive, diamond-shaped pattern from old leaf scars.

The Dendrology Lab at Virginia Tech (Undated) describes P. canariensis in greater detail: The leaves are alternate, pinnately compound, and can reach lengths of up to 1.8 metres. Individual leaflets are lance-shaped and 30 to 45cm long with the lower half of the petiole covered with 5-8cm sharp spines that are shiny and dark green above and have a feathery appearance. The flowers are dioecious and both males and females occur on dense, hanging many-branched 30cm clusters. The flowers are creamy yellow-white and open from a husk-like structure that appears periodically throughout the year. P. canariensis's fruit is a fleshy elliptical drupe that can be 1-3cm long and orange-brown to dark purple. It is date-like and occurs in up to 45cm hanging clusters. The fruit ripens in summer and is edible.\"

#### Notes

Floridata (1999) reports that, \"In areas of high rainfall *P. canariensis* are often seen with ferns growing from among the old leaf stems. Decomposing leaf litter and other fibrous matter collect there creating an absorbent compost that sword ferns love, forming a hanging garden just below the palm's canopy\".

Adams et al. (2000) caution against the planting of P. canariensis in positions where young children have ready access such as schools, playgrounds and gardens.



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#### Uses

Gilman and Watson (1994) state that, \"P. canariensis can be used in large parking lot islands; wide tree lawns; medium-sized parking lot islands; medium-sized tree lawns; and is recommended for buffer strips around parking lots or for median strip plantings in the highway; specimen; sidewalk cutout (tree pit); residential street tree. P. canariensis has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common.\" Floridata (1999) has found that, \"This is not a good palm tree for residences unless the planting area is very large. The huge bulk of the Canary Island palm dwarfs most houses. This palm is best used along boulevards, on campuses and in parks and grouped in trios to form focal points in cityscapes\".

#### **Habitat Description**

Morici (1998) reports that in its native habitat on the Canary Islands, *P. canariensis* grows on a wide variety of soils, all of volcanic origin and usually fertile. *P canariensis* has an extensive root system, which allows these palms to explore the surrounding earth to find subterranean water even at long distances. *P canariensis* even grow in subxeric areas because they are resistant to temporary swamping of the soil caused by sudden rains. Rivas-Martinez *et al.* (1993) explain that, \"Other trees and shrubs, with typical root systems, which could act as competitor species do not get established in those sites, as they cannot resist asphyxia caused by the waterlogged soil. This is why the *P canariensis* is one of the most grown palm trees throughout the world. It tolerates cold and warmth, drought and floods, shade and sun, and salt spray as well as mountain climate.\" In urban environments where *P canariensis* is often introduced as an ornamental, this species can thrives in a variety of habitats and soil types (Gilman and Watson, 1994).

### Reproduction

*P. canariensis* seed can be dispersed *via* water through storm drains and then into creeks and rivers, but birds also digest and spread the seed (Brusati and DiTamaso, 2003).

#### **General Impacts**

*P. canariensis* need to be properly pruned on a regular occasion to avoid human contact until they reach particular heights. Injuries from the fronds in which fragmented barbs lodge under the skin often require multiple surgical procedures in order to remove all foreign material. Since their introduction, *P. canariensis* have also become a source of bronchial asthma in a certain individuals, as palm fronds senesce and dry out (Adams *et al.* 2000; and Blanco *et al.* 1995). Brusati and DiTamaso (2003) also explain that *P. canariensis* has been documented displacing native trees and in one instance causing a river to change direction and subsequently flooding a historical site.

#### **Management Info**

<u>Biological</u>: Giant palm weevil (*Rhynchophorus palmarum*) can kill recently transplanted palms or those which are injured. Once in the palm, remedial control is not possible. Palm leaf skeletonizer (*Homaledra sabalella*) devours leaves. A variety of scale insects infest this palm. *P. canariensis* is mildly susceptible to lethal yellowing disease and leaf spot. Stressed and damaged trees often are infected with the Ganoderma fungus (*Ganoderma applanatum*). A conk is formed at the base of the tree, which appears as a varnished shelf or mushroom. A wet trunk and wet soil encourage this disease (Gilman and Watson, 1994).

**Principal source:** Gilman and Watson, 1994. *Phoenix canariensis* Canary Island Date Palm Brusati and DiTamaso, 2003. Part IV. Plant Assessment Form: *Phoenix canariensis* Chabaud

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**ALIEN RANGE** 

[1] AUSTRALIA [1] BERMUDA [2] FRANCE [1] GIBRALTAR [1] ITALY [1] MEXICO [2] MOROCCO [5] NEW ZEALAND [2] TUNISIA [12] UNITED STATES

#### **BIBLIOGRAPHY**

19 references found for Phoenix canariensis

### **Managment information**

Adams, C. D., F. J. Timms, and M. Hanlon. 2000. Phoenix date palm injuries: a review of injuries from the phoenix date palm treated at the Starship Children's Hosptal. Aust. N.Z. J. Surg. (2000) 70, 355-357.

Gilman, E. F., and D. G. Watson. 1994. Phoenix canariensis Canary Island Date Palm. US Forest Service, Southern Group of State Foresters: Fact Sheet ST-439.

Timmins, S. M. and H. Braithwaite, 2002. Early detection of invasive weeds on islands. In Turning the tide: the eradication of invasive species: 311-318. Veitch, C.R. and Clout, M.N.(eds). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.

Summary: Eradication case study in Turning the tide: the eradication of invasive species.

Varnham, K. 2006. Non-native species in UK Overseas Territories: a review. INCC Report 372. Peterborough: United Kingdom.

**Summary:** This database compiles information on alien species from British Overseas Territories.

Available from: http://www.jncc.gov.uk/page-3660 [Accessed 10 November 2009]

#### **General information**

Appendix B.2: Invasive Exotic Species of the Carlsbad Hydrologic Unit

Atkinson, I. A. E. 1997. Problem weeds on New Zealand islands Science For Conservation: 45. Department of Conservation, Wellington, New Zealand.

Blanco, C., T. Carillo, J. Quiralte, C. Pascual, M. M. Esteban, and R. Castillo. 1995. Occupational rhinoconjunctivitis and bronchial asthma due to Phoenix canariensis pollen allergy. Allergy. 1995 Mar;50(3):277-80.

Brandes, D. 2001. Urban flora of Sousse (Tunisia). Botanisches Institut und Botanischer Garten der TU Braunschweig

Brusati, E., and J. M. DiTomaso. 2003. Part IV. Plant Assessment Form: Phoenix canariensis Chabaud. Dept. Plant Sci., Mail Stop 4, Davis, CA. Dendrology at Virginia Tech. Undated. Canary Island date palm Arecaceae Phoenix canariensis hort. ex Chabaud. Department of Forestry, Virginia Tech.

Summary: Available from: http://www.fw.vt.edu/dendro/dendrology/Syllabus2/factsheet.cfm?ID=597 [Accessed 02 August 2005] Esler, A. E., and S. J. Astridge. 1987. The naturalization of plants in urban Auckland, New Zealand - Records of introduction and naturalization. New Zealand Journal of Botany, 1987, Vol. 25: 523-537.

Floridata, 1999. Plant Profile: Phoenix canariensis. Floridata.com

Summary: Available from: http://www.floridata.com/ref/p/phoe can.cfm [Accessed 02 August 2005]

ITIS (Integrated Taxonomic Information System), 2005. Online Database Phoenix canariensis

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=504333 [Accessed March 2005] Knapp, J. 2005. Invasive Plant Management Plan. College of Agriculture and Crop Science, California Polytechnic State University. Morici, C. 1998. Phoenix canariensis in the wild. Principes. 42(2). April, 1998. 85-89, 92-93

Summary: Available from: http://www.palms.org/principes/1998/canariensis.htm [Accessed 02 August 2005]

Rose Creek Watershed Alliance. Undated. The Dirty Dozen Exotic Plant Species in the Rose Creek Watershed. San Diego, CA. Staples, G. W., D. Herbst, and C. T. Imada. 2000. Survey of invasive or potentially invasive cultivated plants in Hawaii. Bishop Mueseum Occasional Papers Number 65, 35 pages 15 November 2000

USDA-GRIN (Germplasm Resources Information Network). 2005. Phoenix canariensis. National Genetic Resources Program [Online Database] National Germplasm Resources Laboratory, Beltsville, Maryland.

Summary: Available from: http://plants.usda.gov/cgi\_bin/topics.cgi?earl=plant\_profile.cgi&symbol=PHCA13 [Accessed 02 August 2005] USDA-NRCS (Natural Resource Conservation Service). 2005. Phoenix canariensis. The PLANTS Database Version 3.5 [Online Database] National Plant Data Center, Baton Rouge, LA.

Summary: Available from:

http://plants.usda.gov/java/nameSearch?mode=Scientific+Name&keywordquery=Phoenix+canariensis&go.x=11&go.y=7 [Accessed 02 March 2006]