GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Cedrela odorata***

Cedrela odorata 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Sapindales	Meliaceae

Common name Barbados cedar (English), sita hina (English, Tonga), cedro cubano (Spanish, Galapagos Is.), Spanish cedar (English), cigar box cedar (English), West Indian cedar (English), Mexican cedar (English), cedro (Portuguese, Brazil), cèdre acajou (French), cèdre des barbares (French)

Synonym

Similar species

Summary Cedrela odorata is a native of the West Indies and from Central America to South America, including the Brazilian Atlantic and Amazon Rain Forest. It has been introduced to many Pacific Islands and South Africa. This fast growing timber tree has become invasive in some areas, especially those disturbed by cutting.

view this species on IUCN Red List

Species Description
Cedrela odorata is a \"tree up to 40m high with a diameter larger than 2m; leaves up to 80cm long, with (5-) 6-7 (-14) pairs of leaflets with a heavy odor of onions or garlic; leaflets ovate to lanceolate, acute to rounded at base, acute, acuminate or obtuse at tip, 8-20cm long, 2.5-5.5 (-8)cm broad, generally glabrous; flowers in clusters at the extremes of the branches, with a heavy malty odour, 6-9mm long; petals greenish-cream in bud, opeining white; fruit 2.5-4.5cm lolng, septicidally 5-valved; seeds flat, chestnut-brown, about 25mm long and 6-7mm broad.\" (Adams, 1972, in PIER, 2003; CATIE, 1997)

Notes
Introduced as a possible timber tree to Yap and possibly other islands in Micronesia. Introduced as a timber tree to Tonga - should be monitored for possible spread (PIER, 2003). An invasive species in South Africa. Also listed on the in IUCN Red List of Threatened Species as it is threatened in parts of the Americas due to over exploitation.

Lifecycle Stages
Germination is rapid, usually completed within 2 to 4 weeks. Trees begin to fruit at an age of 10 to 12 years. In natural forest, high seedling densities are common near fruiting trees shortly after the beginning of the rainy season, but most of these seedlings disappear by the middle of the rains or a little later; this high natural mortality may be due to shade or competition but is thought to be partly due to damping off or other root problems (Cintron, 1990).

Uses
Widely planted as a timber species for the fabrication of furniture, doors and windows, (PIER, 2003; CATIE, 1997); the bark is used for medicinal purposes (CATIE, 1997).

Habitat Description
Roadsides, pastures and disturbed areas to 1025m - 1220m (3360ft-4000ft) elevation in Jamaica (Adams, 1972, in PIER, 2003). In the moist uplands of the Galapagos Is. *C. odorata* is always found naturally on well-drained soils, often but not exclusively on limestone. It tolerates a long dry season but does not flourish in areas of rainfall greater than about 3000mm (120 in) or on sites with heavy or waterlogged soils (Cintron, 1990).

Reproduction
The large and much-branched inflorescences bear numerous small, five-part, symmetrical greenish-white flowers. Trees are monoecious; male and female flowers are borne on the same inflorescence but the species is proterogynous (female flowers open first). Fruit development takes about 9 or 10 months and fruits ripen during the next dry season. The fruit, a large woody capsule, is borne near branch tips. Fruits ripen, split, and shed seeds while still attached to the parent tree (Cintron, 1990).
Fruits open from the top downward to release 40 to 50 winged seeds when ripe. Seed weight is about 8 to 10 percent of dry fruit weight. One kilogram (2.2 lb) contains 20,000 to 50,000 seeds (9,100 to 22,700/lb, approximately). Seeds are 20 to 25mm (0.75 to 1.0 in) long, wing included, and are wind dispersed. Vigorous germination is the rule, with seed viability reportedly up to 90 percent (Cintron, 1990).

Management Info
Chemical: In the Galapogos hack and squirt application of 50% Tordon 22K has been found successful (Gardener, 2002).

Pathway
Introduced as a timber tree to a number of Pacific Islands (PIER, 2003).

Principal source: Pacific Islands Ecosystems at Risk, (PIER)

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)

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ALIEN RANGE

[1] AMERICAN SAMOA
[1] ANTIGUA AND BARBUDA
[1] ARGENTINA
[1] BARBADOS
[1] BELIZE
[1] BOLIVIA
[1] CAYMAN ISLANDS
[1] COLOMBIA
[2] COOK ISLANDS
[1] COSTA RICA
[1] CUBA
[1] DOMINICA
[2] DOMINICAN REPUBLIC
[6] ECUADOR
[1] EL SALVADOR
[2] FIJI
[1] FRENCH GUIANA
[1] FRENCH POLYNESIA
[1] GRENADA
[1] GUADELOUPE
[1] GUATEMALA
[1] GUYANA
[1] HAITI
[1] HONDURAS
[1] JAMAICA
[1] MEXICO
[1] MICRONESIA, FEDERATED STATES OF
[1] MONTSERRAT
[2] NEW CALEDONIA
[1] NICARAGUA
[1] PANAMA
[1] PERU
[1] SAINT KITTS AND NEVIS
[1] SAINT LUCIA

[2] SAMOA
[1] SURINAME
[1] UNITED STATES
[1] SOUTH AFRICA
[2] TONGA
[1] VENEZUELA

BIBLIOGRAPHY

11 references found for **Cedrela odorata**

Managment information

European and Mediterranean Plant Protection Organization (EPPO), 2006. Guidelines for the management of invasive alien plants or potentially invasive alien plants which are intended for import or have been intentionally imported. EPPO Bulletin 36 (3), 417-418.

Gardener, 2000. A Good Weed Travel Report.
Summary: some control trials on *C. odorata* in Australia.
Available from: http://nb.au.com/nswweedsoc/July2000/4_TravelReport.htm [Accessed 1 July 2003]

IUCN 2010. IUCN Red List of Threatened Species. Version 2010.4.
Summary: The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on taxa that have been globally evaluated using the IUCN Red List Categories and Criteria. This system is designed to determine the relative risk of extinction, and the main purpose of the IUCN Red List is to catalogue and highlight those taxa that are facing a higher risk of global extinction (i.e. those listed as Critically Endangered, Endangered and Vulnerable). The IUCN Red List also includes information on taxa that are categorized as Extinct or Extinct in the Wild; on taxa that cannot be evaluated because of insufficient information (i.e. are Data Deficient); and on taxa that are either close to meeting the threatened thresholds or that would be threatened were it not for an ongoing taxon-specific conservation programme (i.e. are Near Threatened).
Available from: http://www.iucnredlist.org/ [Accessed 25 May 2011]

PIER (Pacific Island Ecosystems at Risk), 2003. *Cedrela odorata*
Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information.
Available from: http://www.hear.org/pier/species/cedrela_odorata.htm [Accessed 1 July 2003]

Renter�a, Jorge Luis; Rachel Atkinson, Ana Mireya Guerrero, Johanna Mader 2006. Manual de Identification y Manejo de Malezas en las Islas Gal�pagos. Segunda edici�n, Fundaci�n Charles Darwin, Santa Cruz, Gal�pagos, Ecuador.
Summary: An illustrated guide providing practical information for the effective control of the worst invasive plant species in Galapagos. Designed for farmers and other land managers, it describes manual and chemical control methods. It also includes 8 species that are potential problems for Galapagos. Language: Spanish
Una gu�a con ilustraciones que provee informaci�n para el control efectivo de las peores plantas invasoras en Gal�pagos. Esta dise�ada para los agricultores y personas involucradas en conservaci�n. De una forma clara y simple se describe los m�todos de control manuales y qu�micos; tambi�n incluye 8 especies que potencialmente podr�an ser un problema para Gal�pagos. Lenguaje: Espa�ol.

General information

Centro Agron�mico Tropical de Investigaci�n y Ense�anza (CATIE). 1997. Productos no maderables del bosque en Baja Talamanca, Costa Rica. Ocampo, R., Villalobos, R. & Cifuentes, M. (eds.). Turrialba, CATIE, 118 p, ISBN 9977-57-292-5.
Summary: Description and uses.

Cintron, B. 1990. *Cedrela odorata*. Silvics of North America: 1. Conifers; 2. Hardwoods. Agriculture Handbook 654. U.S. Department of Agriculture, Forest Service, Washington, DC. Vol 2. Burns, R., and Honkala, B. (tech. coords
Summary: Detailed information about *C. odorata* primarily from a forestry perspective.
Available from: http://www.na.fs.fed.us/spfo/pubs/silvics_manual/volume_2/cedrela/ordota.htm [Accessed 30 June 2003].

Florence J. Chevillotte H. Ollier C.& Meyer J.-Y. 2007. *Cedrela odorata* Base de donn�es botaniques Nadeaud de l Herbier de la Polyn�sie fran�aise (PAP).
Summary: Base de donn�es sur le flore de Polyn�sie Fran�aise.
Available from: http://www.herbier-tahiti.pf/Selection_Taxonomie.php?id_tax=2403 [Accessed 26 March 2008]

ITIS (Integrated Taxonomic Information System), 2004. Online Database *Cedrela odorata*
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=29014 [Accessed December 31 2004]

MacKee, H.S. 1994. Catalogue des plantes introduites et cultiv�es en Nouvelle-Cal�donie, 2nd edn. MNHN, Paris.
Summary: Cet ouvrage liste 1412 taxons (esp�ces, sous esp�ces et vari�t�s) introduits en Nouvelle-Cal�donie. L auteur pr�cise dans la majorit� des cas si l esp�ce est cultiv�e ou naturalis�e.

Meyer, J.-Y. 2000. Invasive plants in the Pacific Islands. In: The Invasive Species in the Pacific: A Technical Review and Draft Regional Strategy. Sherley, G. (tech. ed). Published in June 2000 by the South Pacific Regional Environment Programme (SPREP).
Summary: Resource that includes the distribution of invasive species throughout the Pacific Islands.