

*Cinnamomum camphora*  [简体中文](#) [正體中文](#)

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Laurales	Lauraceae

**Common name** arvore da camphora (Portuguese), camphor laurel (English), camphre (French), camphrier (French), Japanese camphor (English), kampferbaum (German), canfora (Italian), kuso-no-ki (Japanese), alcanfor (Spanish), alcanforero (Spanish), campher (German), camphor tree (English)

**Synonym** *Laurus camphora* , (L.)

**Similar species** *Cinnamomum zeylanicum*

**Summary** *Cinnamomum camphora* is native to Japan, China, Taiwan and northern Vietnam. *C. camphora* has become widely naturalised in Australia. In the United States, it grows along the Gulf Coast and in California. *C. camphora* seeds are easily spread by birds from cultivated yards to open forests, and it is also spread to new locations through plant nursery sales. *C. camphora* fruits, leaves, and roots are toxic to humans in large doses.



[view this species on IUCN Red List](#)

## Species Description

The camphor tree is a broadleaved evergreen growing to heights of 15 - 30m achieving a canopy that is twice as wide as its height. According to FFI (2003), the leaves of *C. Camphora* are 5-8cm long, 1.5-5cm wide, oval-shaped, and taper into an acute apex. Leaf bases are wedge-shaped or rounded and the leaf surfaces are bright green and lustrous above, duller and slightly greyish-green below. The fruit of *C. Camphora* is a black drupe, about 2cm in diameter, held by a leathery floral, funnel-like tube that occurs in clusters at the end of a stalk. The leaves of the camphor tree give off a strong odour when crushed making it easy to identify.

## Notes

Major chemical compounds in wood and leaves of *C. camphora* are camphor, saffrole, linalool, 1,8-cineole, a-pinene, a-terpineol, ?-cymene.

## Uses

According to LCD (2000), *C. camphora* is widely planted as a shade tree, screen, or windbreak. In China and Japan, it is grown commercially for its medicinal oil.

## Habitat Description

LCD (2000) indicates that *C. camphora* prefers fertile, sandy soil. It will tolerate a pH anywhere in the range of 4.3 to 8, and will grow in full sun or partial shade. However, *C. camphora* does not do well in wet soils. Established trees are tolerant of drought. Occurs primarily in drier disturbed areas such as roadsides and fencerows, but has invaded natural areas such as mesic hammocks, upland pine woods, and scrubland.

## Reproduction

WAC (UNDATED) indicates that *C. camphora* flowers are hermaphroditic. The fruit ripens in autumn and turns black when ripe. Seeds of *C. camphora* have poor germination due to a hard seed coat.

## General Impacts

Murray and Ramey (2003) note that *C. camphora* grows like a weed, infesting forests and displacing native trees. According to LCD (2000), *C. camphora* fruits, leaves, and roots are toxic to humans in large doses. They contain chemicals that stimulate the central nervous system and may affect respiration or cause convulsions. In Chinese medicine, camphor is forbidden for pregnant women and those with a deficiency of vital energy or yin.

## Management Info

**Preventative measures:** A [Risk Assessment of \*Cinnamomum camphora\*](#) for Hawai'i and other Pacific islands was prepared by Dr. Curtis Daehler (UH Botany) with funding from the Kaulunani Urban Forestry Program and US Forest Service. The alien plant screening system is derived from Pheloung *et al.* (1999) with minor modifications for use in Pacific islands (Daehler *et al.* 2004). The result is a score of 7.5 and a recommendation of: "Likely to cause significant ecological or economic harm in Hawai'i and on other Pacific Islands as determined by a high WRA score, which is based on published sources describing species biology and behaviour in Hawai'i and/or other parts of the world."

**Physical:** According to Starr *et al.* (2003), small seedlings of *C. camphora* can be hand pulled or grubbed out. It is important that the roots are removed otherwise the tree could regrow.

**Chemical:** Foliar spray with herbicides on young *Cinnamomum camphora* trees up to 3m tall is also effective. Basal bark or cut stump herbicide treatments are effective for trees up to 6m, or with a basal stem diameter up to 30cm with no multi stems. For basal bark, spray from ground level up to a height of 30cm or higher than where multi stems branch.

**Principal source:** [Cinnamomum camphora \(LCD, 2000\)](#)  
[Pacific Islands Ecosystems at Risk, \(PIER, 2002\)](#)

**Compiler:** National Biological Information Infrastructure (NBII) & IUCN/SSC Invasive Species Specialist Group (ISSG)

**Review:** Ching-Te Chien (Ph.D.) Associate Researcher Taiwan Forestry Research Institute. Taipei, Taiwan

**Publication date:** 2005-07-03

## ALIEN RANGE

[1] AUSTRALIA	[1] BERMUDA
[1] CUBA	[1] DOMINICAN REPUBLIC
[1] FRENCH POLYNESIA	[1] GHANA
[1] GUADELOUPE	[1] HAITI
[1] NEPAL	[1] NEW CALEDONIA
[1] PUERTO RICO	[1] REUNION
[10] UNITED STATES	[1] VIET NAM
[1] VIRGIN ISLANDS, U.S.	

## BIBLIOGRAPHY

19 references found for *Cinnamomum camphora*

### Management information

Daehler, C.C.; Denslow, J.S.; Ansari, S and Huang-Chi, K., 2004. A Risk-Assessment System for Screening Out Invasive Pest Plants from Hawaii and Other Pacific Islands. Conservation Biology Volume 18 Issue 2 Page 360.

**Summary:** A study on the use of a screening system to assess proposed plant introductions to Hawaii or other Pacific Islands and to identify high-risk species used in horticulture and forestry which would greatly reduce future pest-plant problems and allow entry of most nonpests.

[Department of the Environment and Heritage \(DEH\) Australia., 2005. Threatened Species and Threatened Ecological Communities. \*Cinnamomum camphora\*, Camphor Laurel most toxic chemotypes.](#)

**Summary:** Advice to the Minister for the Environment and Heritage from the Threatened Species Scientific Committee (TSSC) on Amendments to the List of Key Threatening Processes under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act): *Cinnamomum camphora*, Camphor Laurel most toxic chemotypes.

Available from: <http://www.deh.gov.au/biodiversity/threatened/nominations/c-camphora-unsucessful.html> [Accessed 25 April 2005]

Global Invasive Species Database (GISD) 2024. Species profile *Cinnamomum camphora*. Available from: <https://iucngisd.org/gisd/species.php?sc=291> [Accessed 19 May 2024]

[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.](#)

[PIER \(Pacific Island Ecosystems at Risk\), 2002. \*Cinnamomum camphora\*](#)

**Summary:** Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information.

Available from: [http://www.hear.org/pier/species/cinnamomum\\_camphora.htm](http://www.hear.org/pier/species/cinnamomum_camphora.htm) [Accessed 5 February 2003].

[Starr, F. Starr, K., Loope, L. 2003. \*Cinnamomum camphora\*. United States Geological Survey-Biological Resources Division.](#)

**Summary:** A description of management and control procedures of *C. camphora*.

Available from: [http://www.hear.org/starr/hiplants/reports/pdf/cinnamomum\\_camphora.pdf](http://www.hear.org/starr/hiplants/reports/pdf/cinnamomum_camphora.pdf) [Accessed 26 July 2003].

[Varnham, K. 2006. Non-native species in UK Overseas Territories: a review. JNCC 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

[Centre des ressources biologiques. Plantes tropicales. INRA-CIRAD. 2007.](#)

**Summary:** Available from: <http://collections.antilles.inra.fr/> [Accessed 31 March 2008]

[Conservatoire Botanique National De Mascarin \(BOULLET V. coord.\) 2007. - \*Cinnamomum camphora\* Index de la flore vasculaire de la Réunion \(Trachéophytes\) : statuts, menaces et protections. - Version 2007.1](#)

**Summary:** Base de données sur la flore de la Réunion. De nombreuses informations très utiles.

Available from: <http://flore.cbnm.org/index2.php?page=taxon&num=f3173935ed8ac4bf073c1bcd63171f8a> [Accessed 26 March 2008]

[FFI \(Florida Forestry Information\). 2003. \*Cinnamomum camphora\*. University of Florida.](#)

**Summary:** A short summary on the description of *C. camphora*.

Available from: <http://www.sfrc.ufl.edu/Extension/ffws/tflau.htm> [Accessed 25 July 2003]

[Florence J., Chevillotte H., Ollier C. & Meyer J.-Y. 2007. \*Cinnamomum camphora\* Base de données botaniques Nadeaud de l'Herbier de la Polynésie française \(PAP\).](#)

**Summary:** Available from: [http://www.herbier-tahiti.pf/Selection\\_Taxonomie.php?id\\_tax=2128](http://www.herbier-tahiti.pf/Selection_Taxonomie.php?id_tax=2128) [Accessed 31 March 2008]

[Fournet, J. 2002. Flore illustrée des phanérogames de guadeloupe et de Martinique. CIRAD-Gondwana editions.](#)

[ITIS \(Integrated Taxonomic Information System\), 2004. Online Database \*Cinnamomum camphora\*](#)

**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=18175](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=18175) [Accessed December 31 2004]

[LCD. 2000. \*Cinnamomum camphora\* Florida.](#)

**Summary:** A report on various aspects of *C. camphora*.

Available from: [http://www.floridata.com/ref/c/cinn\\_cam.cfm](http://www.floridata.com/ref/c/cinn_cam.cfm) [Accessed 25 July 2003].

[MacKee, H.S. 1994. Catalogue des plantes introduites et cultivées en Nouvelle-Calédonie, 2nd edn. MNHN, Paris.](#)

**Summary:** Cet ouvrage liste 1412 taxons (espèces, sous espèces et variétés) introduits en Nouvelle-Calédonie. L'auteur précise dans la majorité des cas si l'espèce est cultivée ou naturalisée.

[Murray, A., Ramey, V. 2003. \*Camphor Tree\*. University of Florida, IFAS, Center for Aquatic and Invasive Plants.](#)

**Summary:** A short summary of the biology and ecology of *C. camphora*.

Available from: <http://aquat1.ifas.ufl.edu/camphor.html> [Accessed 26 July 2003]

[RGIS \(Rockledge Gardens Information Sheet\). UNDATED. \*Camphor Tree\*.](#)

**Summary:** This site describes a similar species.

Available from: <http://www.rockledgegardens.com/factsheets/camphortree.pdf> [Accessed 12 August 2003].

[USDA, ARS. 2001. \*Cinnamomum camphora\*. National Genetic Resources Program. Germplasm Resources Information Network - \(GRIN\) \[Online Database\]. National Germplasm Resources Laboratory, Beltsville, Maryland](#)

**Summary:** A brief description of the various names of *C. camphora*.

Available from: [http://www.ars-grin.gov/cgi-bin/npgs/html/tax\\_search.pl?Cinnamomum+camphora](http://www.ars-grin.gov/cgi-bin/npgs/html/tax_search.pl?Cinnamomum+camphora) [Accessed 25 July 2003].

[USDA-NRCS \(United States Department of Agriculture\). 2002. \*Cinnamomum camphora\*. The Plants Database, Natural Resource Conservation Service.](#)

**Summary:** A summary on the biology, and distribution of *C. camphora*

Available from: <http://plants.usda.gov/java/profile?symbol=CICA> [Accessed 25 July 2003].

[World Agroforestry Centre \(WAC\). UNDATED. \*Cinnamomum camphora\*. International Centre for Research in Agroforestry \(ICRAF\).](#)

**Summary:** A brief summary on the biology of *C. camphora*.

Available from: <http://www.worldagroforestrycentre.org/Sites/TreeDBS/Aft/SpeciesInfo.cfm?SpID=528> [Accessed 26 July 2003].