Annona glabra 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Magnoliales	Annonaceae

Common name kaitambu (English, Fiji), kaitambo (English, Fiji), uto ni bulumakau (English, Fiji), uto ni mbulumakau (English, Fiji), corossolier des marais (English, French), annone des marais (English, French), bullock's heart (English), alligator apple (English), pond apple (English), cherimoyer (English)

Synonym

Similar species

Summary Annona glabra is a highly invasive woody weed that threatens wetland and riparian ecosystems of wet tropics, world heritage areas and beyond. It can establish as a dense understorey that suppresses other growth leading to monocultures.

view this species on IUCN Red List

Species Description
“Tree (2-) 3-8 (-12)m high, the trunk narrowly buttressed at the base; leaves oblong-elliptical, acute or shortly acuminate, 7-15cm long, up to 6cm broad; pedicel curved, expanded distally; sepals 4.5mm long, 9mm broad, apiculate; outer petals valvate, ovate-cordate, cream-coloured with a crimson spot at base within, 2.5-3cm long, 2-2.5cm broad; inner petals subimbricate, shortly clawed, 2-2.5cm long, 1.5-1.7cm broad, whitish outside, dark crimson within; stigmas sticky, deciduous; fruit up to 12cm long, 8cm broad, yellow outside when ripe, pulp pinkish-orange, rather dry, pungent-aromatic; seeds light brown, 1.5cm long, 1cm broad.” (Adams, 1972. In PIER, 2003)

Notes
Naturalised and sometimes exhibiting invasive behaviour in French Polynesia, (PIER, 2003). In Australia excessive drainage of surrounding areas for land reclamation raises the saline water table level sufficient to kill melaleuca trees thus allowing invasion by the salt tolerant pond apple, (Land Protection, 2001).

Habitat Description
A semi-deciduous tree, usually 3-6m tall. Both the fruit and the seed float (an adaptation which facilitates dispersal in flowing water). The hard seeds can remain viable for considerable periods in either fresh, brackish or sea water. *A. glabra* can behave as a 'freshwater or brackish water mangrove' as it can survive root immersion at high tide and prolonged freshwater flooding. Seedlings require ample soil moisture and sunlight to survive. Such conditions can be expected on riverbanks and in naturally open wetlands or disturbed wetlands and rainforests.

Reproduction
From about two years old trees begin to flower and produce fruit, (Land Protection, 2001). Fruits and seeds spread by water, birds, and some mammals, (PIER, 2003). Each fruit contains up to 100 or more seeds about 1cm in length. Massive seed production has resulted in a 20cm deep carpet of seed covering the ground. (Land Protection, 2001)

General Impacts
In north Queensland, Australia, it forms dense monotypic stands which displace native vegetation, (PIER, 2003). *Annona glabra* is one of the worst invaders of the Wet Tropics. Its tolerance of salt and immersion in fresh water enables pond apple to invade melaleuca wetlands, where it forms a dense understorey and prevents young melaleucas from developing. (Wet Tropics Management Authority)

Management Info
Mechanical and chemical control measures can be effective but control is very site specific. Contact an expert for advice (Land Protection, 2001).
\r\nPhysical: Pond apple trees and seed are readily destroyed by fire and research into the reintroduction of regular burning to areas that are tolerant to this practice, eg. sedge lands, may prove successful as a management tool, (Land Protection, 2001). Pulling and dozing has been successful in ditches and drains. (Land Protection, 2001)
\r\nChemical: There are no chemicals currently registered for the control of pond apple although some herbicides are available for other woody weeds that grow in similar situations. Some trials involving overall spray, basal bark and stem injection have been conducted and this research is continuing. \"Stems often fuse together giving the appearance of a single stem. In this situation each original stem maintains its own sap system. This complicates control by herbicide\" (Land Protection, 2001).

Pathway
Introduced to Australia in 1912 as a grafting stock for custard apple. (Land Protection, 2001)

Principal source:

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ALIEN RANGE

[1] AUSTRALIA
[2] FIJI
[1] MICRONESIA, FEDERATED STATES OF
[1] NEW GUINEA
[1] UNITED STATES
[1] COOK ISLANDS
[4] FRENCH POLYNESIA
[1] NEW CALEDONIA
[1] SOLOMON ISLANDS
[1] VIET NAM

BIBLIOGRAPHY
8 references found for **Annona glabra**

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.
Land Protection, 2001. Pond apple. PP58, NRM facts, pest series. The State of Queensland (Department of natural Resources and Mines).
PIER (Pacific Island Ecosystems at Risk), 2003. *Annona glabra*
Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information.
Available from: http://www.hear.org/pier/species/annona_glabra.htm [Accessed 8 July 2003]

General information
Fournet, J. 2002. Flore illustr�e des phan�rogames de Guadeloupe et de Martinique. Gondwana �d.
ITIS (Integrated Taxonomic Information System), 2004. Online Database *Annona glabra*
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=18101 [Accessed December 31 2004]

MacKee, H.S. 1994. Catalogue des plantes introduites et cultiv&#65533;es en Nouvelle-Cal&#65533;donie, 2nd edn. MNHN, Paris.
Summary: Cet ouvrage liste 1412 taxons (esp&#65533;ces, sous esp&#65533;ces et vari&#65533;t&#65533;s) introduits en Nouvelle-Cal&#65533;donie. L auteur pr&#65533;cise dans la majorit&#65533; des cas si l esp&#65533;ce est cultiv&#65533;e ou naturalis&#65533;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.
Wet Tropics Management Authority. Pressures on the Rainforest &#65533; Invasive Weeds. &#65533; 2002 by Wet Tropics Management Authority.
Summary: Available from: http://www.wettropics.gov.au/mwha/mwha_weeds.html [Accessed 8 July 2003].