GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Rubus rosifolius***

Rubus rosifolius 简体中文 正體中文 **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Rosales	Rosaceae

Common name akalakala (English, Hawai'i), akala (English, Hawai'i), Mauritius raspberry (English), frambueso de Africa (Spanish), framboisier (French), ola'a (English, Hawaii), forest bramble (English), native raspberry (English, Australia), native bramble (English, Australia), roseleaf raspberry (English), thimbleberry (English)

Synonym
Rubus rosaefolius , Smith
Rubus rosifolius , Smith var. *coronarius* Sims
Rubus commersonnii , Poir.
Rubus coronarius
Rubus eustephanos , var. *coronarius*
Rubus rosifolius , var. *rosifolius*
Rubus rosifolius , var. *commersonii*

Similar species

Summary
Rubus rosifolius is a prickly shrub that produces edible red berries. It is valued for a number of culinary and medicinal purposes. This species has become invasive in Hawai‘i and French Polynesia, where it is capable of intruding into the understory of rainforests. Prickly stems and an ability to form dense thickets make R. rosifolius undesirable in many areas.

view this species on IUCN Red List

Species Description
Rubus rosifolius is a pinnate leaved species. Erect to trailing shrub up to 2m or more in height. Stems are sparsely covered with prickles 1-4mm long. Leaves are alternate and pinnately compound, 7-18cm long, with 3-7 leaflets. Inflorescence mostly of solitary, terminal or axillary flowers. Calyx of 5 lanceolate sepals 1.4 - 2.5cm long, tomentose. Corolla of 5 white, obovate petals 1 - 2cm long. Stamens many, free. Ovaries many. Fruit a subglobose, red, multiple fruit 2 - 3.5cm long, easily detaching from the receptacle. The red fruits are somewhat conical in shape, longer than they are wide.
There are two varieties of *R. rosifolius* that differ only in the number of petals. *Rubus rosifolius* var. *commersonii* has 9-13 petals, while *Rubus rosifolius* var. *rosifolius* has five (Bean, 2001).

Notes
Rubus rosifolius is susceptible to strawberry mild yellow edge-associated *potexvirus* it is transmitted by a vector; an insect; *Chaetosiphon fragaraefolii* belonging to family Aphididae. It is transmitted in a non-persistent manner. The virus possibly requires, for vector transmission, a helper virus (strawberry mild yellow edge *luteovirus*); transmitted by mechanical inoculation and by grafting (Brunt *et al*., 1996).

Lifecycle Stages
Seeds have germination successs of about 90% after 12 weeks (Greening Australia NSW, 2003).

Uses
Fruit is edible and sweet-tasting. Can be made into jams, pies and preserves. Leaves can be made into tea, which can be helpful for painful menstruation, childbirth, flu, and morning sickness. Aboriginal people in Australia used a decoction of the leaves as a traditional treatment for diarrhea (Notman, 2000). The fruit is a mild laxative if eaten in large quantities.
Can be used for regeneration of disturbed sites within its native range in Australia (Greening Australia NSW, 2003). Seen as a good native species to use for the replacement of invasive blackberry (*Rubus fruticosus*) in Australia.
Used as an ornamental plant (NCCPG, 2001).

Habitat Description
Occurs naturally in forest margins, clearings and gullies. Invades understory of moist forests. Grows to over 2000m elevation in Tahiti, and to 1730m in Hawai'i (PIER, 2002). Prefers light soil that is moist and nutrient-rich. In Australia where it is native it is found in rainforest and wet sclerophyll forest from Tasmania to Qld

Reproduction
Seeds spread by birds and rodents that have ingested fruit (PIER, 2002). Can also spread *via* suckers that develop from arching canes (MPAS, 2002).

General Impacts
Threatens many native plants on the Hawai'ian Islands through overcrowding and competition (US EPA, 2002). Is able to form dense thickets when adequate sunlight is available. Can climb using hooks on the stems and prickles on the leaves (BRAIN, 2002).

Management Info
There is no specific management information for *Rubus rosifolius*, but techniques used for the control of blackberry *Rubus fruticosus* agg which is a related species, may be applicable. These are outlined below.
\r\nPreventative measures: Maintenance of soil fertility and pasture may reduce infestations.
\r\nPhysical: Tractor and rotary slasher, hand cutting.
\r\nChemical: there are a range of herbicides that can be used for the control of blackberry, including those that are glyphosate-based, such as Roundup®. These are usually applied by spraying, using a knapsack or mistblower for smaller infestations, or handgun and hose for larger ones (EBOP, 2002).
\r\nBiological: Goats (*Capra hircus*) are able to control infestations through grazing. Care must be taken with this approach however, as goats are a known invasive species as well.

Pathway
In some countries it is grown for its flowers (NCCPG, 2001).

Principal source: PIER (Pacific Island Ecosystems At Risk), 2003. *Rubus rosifolious*

Compiler: IUCN SSC Invasive Species Specialist Group
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Review: Robyn Barker, Honorary Research Associate Plant Biodiversity Centre Dept for Environment & Heritage. Australia.

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ALIEN RANGE

[7] FRENCH POLYNESIA
[1] MARTINIQUE
[2] NEW CALEDONIA
[2] SAINT HELENA
[1] THAILAND
[1] GUADELOUPE
[1] MAYOTTE
[1] REUNION
[1] SWAZILAND
[1] UNITED STATES

Red List assessed species 3: CR = 2; EN = 1;

Otus capnodes **CR**
Pteris adscensionis **CR**
Pritchardia glabrata **EN**

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28 references found for **Rubus rosifolius**

Managment information

Environment (B.O.P) Bay of Plenty.
Summary: An excellent source of information on the control of blackberry (*Rubus fruticosus* agg.). Methods outlined may be applicable for control of invasive populations of *Rubus rosifolius*. Outlines methods and equipment for mechanical control, pasture & stock management, and herbicide use.
Found at: http://www.envbop.govt.nz/weeds/weed26.asp [Accessed 02 December 2002].

IUCN/SSC Invasive Species Specialist Group (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.

PIER (Pacific Island Ecosystems at Risk), 2003. *Rubus rosifolius*
Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information.
Available from: http://www.hear.org/pier/species/rubus_rosifolius.htm [Accessed 3 June 2003]

PIER (Pacific Island Ecosystems at Risk) 2005. *Rubus rosifolius*
Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information. Available from: http://www.hear.org/pier/species/rubus_rosifolius.htm [Accessed 9 November 2005]

Swaziland s Alien Plants Database., Undated. *Rubus rosifolius*
Summary: A database of Swaziland s alien plant species.

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.
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General information

Baret, S., Rouget, M., Richardson, D. M., Lavergne, C., Egoh, B., Dupont, J., & Strasberg, D. 2006. Current distribution and potential extent of the most invasive alien plant species on La R&#65533;union (Indian Ocean, Mascarene islands). Austral Ecology, 31, 747-758.
Summary: L objectif de ce papier est d identifier les zones prioritaires en mati&#65533;re de gestion des invasions biologiques &#65533; La R&#65533;union en mod&#65533;lisant la distribution actuelle et potentiellle d une s&#65533;lection de plantes parmi les plus envahissantes.

Bean, Tony. 2001. Queensland Raspberries. Australian Plants Online, Copyright &#65533; Farrer Centre, Charles Sturt University.
Summary: Good information on the *Rubus* species native to Queensland, Australia.
Available from: http://farrer.riv.csu.edu.au/ASGAP/APOL22/jun01-1.html [Accessed 02 December 2002].

Binggeli, P. 2003. The human dimensions of invasive woody plants. Woody plant Ecology.
Summary: One piece of distribution information.
Available from: http://members.lycos.co.uk/WoodyPlantEcology/docs/gisp-iwp.rtf [Accessed 10 June, 2003].

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Summary: A small amount of general information .
Available from: http://www.brisrain.webcentral.com.au/vines/vines13.html [Accessed 13 June, 2003].

Brunt, A.A., Crabtree, K., Dallwitz, M.J., Gibbs, A.J., Watson, L. and Zurcher, E.J. (eds.) (1996 onwards). `Plant Viruses Online: Descriptions and Lists from the VIDE Database. Version: 20th August 1996.
Summary: Has information on a virus that *R. rosifolius* is susceptible to. .
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Summary: Base de donn&#65533;es sur la flore de la R&#65533;union. De nombreuses informations tr&#65533;s utiles.
Available from: http://flore.cbnm.org/index2.php?page=taxon&num=5cd7edbe7a1a668fdc63c138002cc43a [Accessed 9 April 2008]

Flora of Thailand, 2003.
Summary: Has two synonyms.
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Available from:
http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Rubus+rosifolius&p_format=&p_ifx=plglt&p_lang= [Accessed March 2005]
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