Rubus rosifolius

System: Terrestrial

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
<th>Order</th>
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<tbody>
<tr>
<td>Plantae</td>
<td>Magnoliophyta</td>
<td>Magnoliopsida</td>
<td>Rosales</td>
<td>Rosaceae</td>
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</tbody>
</table>

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

Synonym
Rubus rosaeolius , 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.

- **Preventative measures**: Maintenance of soil fertility and pasture may reduce infestations.
- **Physical**: Tractor and rotary slasher, hand cutting.
- **Chemical**: 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).
- **Biological**: 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 rosifolius*

Compiler: IUCN SSC Invasive Species Specialist Group
Updates with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review: Robyn Barker, Honorary Research Associate Plant Biodiversity Centre Dept for Environment & Heritage. Australia.

Publication date: 2010-10-04

**ALIEN RANGE**

- [7] FRENCH POLYNESIA
- [1] MARTINIQUE
- [2] NEW CALEDONIA
- [2] SAINT HELENA
- [1] THAILAND
- [1] UNITED STATES

Red List assessed species 3: CR = 2; EN = 1;
- *Otus capnodes* CR
- *Pteris adscensionis* CR
- *Pritchardia glabrata* EN

**BIBLIOGRAPHY**
28 references found for *Rubus rosifolius*

Management 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.


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.


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


PIER (Pacific Island Ecosystems at Risk) 2005. Rubus rosifolius

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


Swaziland s Alien Plants Database. Undated. Rubus rosifolius

Summary: A database of Swaziland s alien plant species.


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


Summary: Good information on the Rubus species native to Queensland, Australia.


Summary: One piece of distribution information.


Summary: A small amount of general information.


Summary: Has information on a virus that R. rosifolius is susceptible to.


Summary: Has two synonyms.


Summary: Consequences to the biodiversity of New Caledonia of the introduction of plant and animal species.


Summary: Small amount of information on how to grow R. rosifolius.
ITIS (Integrated Taxonomic Information System), 2005. Online Database Rubus rosigolius

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.


Summary: Resource that includes the distribution of invasive species throughout the Pacific Islands.


MPSA (Middle Path Awareness Sanctuary), 2002. Wild Raspberry - Rubus rosigolius, L. Rosaceae.


Summary: Minimal information on a cultivated variety of R. rosigolius.


Summary: Distribution information, uses, and history of the plant.


Summary: Information on Hawaiian species that are endangered by R. rosigolius.


Summary: Has useful descriptions and very good photos of a wide range of plant species found in the Pacific Islands.