

*Opuntia monacantha* [简体中文](#) [正體中文](#)

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Caryophyllales	Cactacea

**Common name** common prickly pear (English), lauaufai va (Samoan), prickly pear (English, Ascension, Saint Helena), drooping prickly pear (English), red tungy (English, Ascension, Saint Helena), round red prickly pear (English), red tungi (English), Opuntia (English, Ascension, Saint Helena)

**Synonym** *Opuntia humifusa* , Raf.  
*Opuntia vulgaris* , auct. non P. Mill.

**Similar species** *Opuntia cochenillifera*

## Summary



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

## Species Description

*Opuntia monacantha* are shrubs or small trees up to 4 meters tall; joints glossy green when fresh, narrowly obovate to oblong-lanceolate; base somewhat cuneate, 10 to 35 centimeters long, 7.5 to 12.5 centimeters wide, margins undulate toward apex. Areoles with 1 to 3 gray or yellowish to reddish brown spines with darker tips, 1 to 7.5 centimeters, trunk areoles with 10 or more spines. Flowers 7.5 to 10 centimeters long, 5 to 7.5 centimeters in diameter; outer perianth parts yellow with a reddish median stripe, 18 to 25 millimeters long, 12 to 15 millimeters wide, inner perianth parts yellow to orange, rotate, 25 to 40 millimeters long, 12 to 40 millimeters wide; staminal filaments green to white; style green, 12 to 20 millimeters long; stigma lobes 8 to 10, cream yellow. Berries reddish purple, fleshy, conical to obovoid, 5 to 7.5 centimeters long, 4 to 5 centimeters in diameter (Wagner *et al.* 1999, in PIER 2006).

## Notes

The accepted name of the common prickly pear is *Opuntia monacantha* (ITIS 2008), however, the scientific name *Opuntia vulgaris* is the name most frequently used in the literature reviewed for this profile. In all cases the scientific names used are faithful to the information given in the source.

## Uses

The fruits of common prickly pear (*Opuntia monacantha*) may be consumed by humans. A very strong spirit which tastes of whiskey may be distilled from this plant (Grant 1883). It was introduced to Ascension for the purpose of enriching the soil and preventing the evaporation of moisture (Ascension Island Conservation Centre Undated).

Before synthetic dyes were produced *O. monacantha* plants were cultivated for the purpose of supporting populations of *Dactylopius coccus*. When crushed the bodies of this Mexican scale insect produce a carmine-coloured dye.

## Habitat Description

*Opuntia monacantha* is found in dry sites in its introduced range in the Pacific (SPREP 2000). In Fiji it is often found in agricultural or wasteland areas (Smith 1981, in PIER 2006).

## General Impacts

The Global Compendium of Weeds (2007) describes *Opuntia monacantha* as an "agricultural weed", "cultivation escape", "environmental weed" and "noxious weed".

## Management Info

**Biological:** Cochineal (*Dactylopius* spp.) and Cactoblasts (*Cactoblastis* spp.) are the two most important biological control agents for prickly pear cacti. The two attack the cactus in a totally different manner. Cochineal species attach to the outside of the plant and sucks the moisture out of the plant. Cactoblasts are black and yellow striped grubs that tunnel into and devour the inside of the plant (North West Weeds 2007). *Cactoblastis* oviposits by gluing sticks of about 50 to 90 eggs on cactus spines; the gregarious larvae bore into the pads or cladodes, devouring them from the inside (Stiling 2002). Because of its oligophagous feeding habits *Cactoblastis* has been successful against a whole range of *Opuntia* species including 11 species of North American origin (Julien and Griffiths 1998, in Stiling 2002).

Following the release of *Cactoblastis cactorum* in Australia the prickly pear *Opuntia monacantha* population collapsed (Dodd 1940, in Stiling 2002). The success of *Cactoblastis* in Australia was followed by introductions to control pest *Opuntia* in South Africa, St. Helena, Hawaii, New Caledonia, Pakistan, Kenya and Ascension Island. In 1913 *Dactylopius ceylonicus* was introduced into South Africa and achieved control of *Opuntia vulgaris* within a few years. In 1928 *D. ceylonicus* and *Dactylopius opuntiae* were used as biological control agents in Mauritius against *Opuntia vulgaris* and *O. Tuna*. In 1950 the cactus moth *C. cactorum* was also introduced in Mauritius for the purpose of controlling *O. vulgaris*. In 1974 *C. cactorum* was introduced to Ascension in an attempt to control *O. vulgaris* (Ascension Island Conservation Centre Undated).

## Pathway

*Opuntia monacantha* is cultivated on many islands in the Pacific.

## Principal source:

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

## Review:

**Pubblcation date:** 2010-06-12

## ALIEN RANGE

<b>[1]</b> AMERICAN SAMOA	<b>[1]</b> AUSTRALIA
<b>[2]</b> COOK ISLANDS	<b>[2]</b> ECUADOR
<b>[1]</b> FIJI	<b>[1]</b> GIBRALTAR
<b>[1]</b> GUAM	<b>[1]</b> MARSHALL ISLANDS
<b>[1]</b> MAURITIUS	<b>[1]</b> MICRONESIA, FEDERATED STATES OF
<b>[1]</b> NAURU	<b>[1]</b> NEW CALEDONIA
<b>[1]</b> NEW ZEALAND	<b>[1]</b> NIUE
<b>[1]</b> NORTHERN MARIANA ISLANDS	<b>[6]</b> PALAU
<b>[3]</b> SAINT HELENA	<b>[2]</b> SAMOA
<b>[1]</b> SOUTH AFRICA	<b>[1]</b> TONGA
<b>[2]</b> UNITED STATES	

## BIBLIOGRAPHY

**14** references found for *Opuntia monacantha*

### Managment information

[Ascension Island Conservation Centre. Undated. \*Plants\*. Green Mountain National Park. Ascension Island Conservation Centre, Georgetown, Ascension Island, South Atlantic Ocean. ASCN 1ZZ](#)

**Summary:** Available from: <http://www.ascensionconservation.org.ac/pdf/6-E-plants-of-Green-Mountain.pdf> [Accessed 28 August 2008]  
[CAB International 2003, Biological Control in IPM Systems in Africa. \(eds. P. Neuenschwander, C. Borgemeister, and J. Langewald\)](#)

**Summary:** Available from: <http://www.cabi.org/pdf/books/9780851996394/9780851996394.pdf> [Accessed 28 August 2008]  
[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.

Stiling, P. 2002. Potential non-target effects of a biological control agent, prickly pear moth, *Cactoblastis cactorum* (Berg) (Lepidoptera: Pyralidae), in North America, and possible management actions. *Biological Invasions* 4: 273-281, 2002.

[Zimmermann, H., H. S. Bloem & H. Klein., 2004. Biology, History, Threat, Surveillance and Control of the Cactus Moth, \*Cactoblastis cactorum\*. Joint FAO/IAEA Programme of Nuclear Techniques in Food and Agriculture](#)

**Summary:** Available from: [http://www-pub.iaea.org/MTCD/publications/PDF/faobsc\\_web.pdf](http://www-pub.iaea.org/MTCD/publications/PDF/faobsc_web.pdf) [Accessed 25 October 2008]

## General information

[Duffey, Eric. 1964. The terrestrial ecology of Ascension Island, \*The Journal of Applied Ecology\* 1 \(2\)](#)

**Summary:** Available from: [http://www.seaturtle.org/PDF/Duffey\\_1964\\_JAppEcol.pdf](http://www.seaturtle.org/PDF/Duffey_1964_JAppEcol.pdf) [Accessed 25 October 2009]

[Global Compendium of Weeds \(GCW\), 2007. \*Opuntia vulgaris\* \(Cactaceae\)](#)

**Summary:** Available from: [http://www.hear.org/gcw/species/opuntia\\_vulgaris/](http://www.hear.org/gcw/species/opuntia_vulgaris/) [Accessed 20 August 2008]

[Grant, Benjamin., 1883. A few notes on St. Helena and Descriptive Guide. Printed and Published by Benjamin Grant, Printer, Guardian Office, Jamestown.](#)

**Summary:** Available from: <http://www.bweaver.nom.sh/grant/grant.htm> [Accessed 20 August 2008]

[Gray, Alan, Tara Pelembe and Stedson Stroud. 2005. The conservation of the endemic vascular flora of Ascension Island and threats from alien species, \*Oryx\* 39 \(4\)](#)

**Summary:** Available from:

[http://journals.cambridge.org/download.php?file=%2FORX%2FORX39\\_04%2FS0030605305001092a.pdf&code=a496b9c9fa1ba28f5d1724b76fbc7feb](http://journals.cambridge.org/download.php?file=%2FORX%2FORX39_04%2FS0030605305001092a.pdf&code=a496b9c9fa1ba28f5d1724b76fbc7feb) [Accessed 10 December 2008]

[ITIS \(Integrated Taxonomic Information System\), 2009. Online Database \*Opuntia monacantha\* \(Willd.\) Haw.](#)

**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=504041](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=504041) [Accessed 25 October 2009]

[North West Weeds. 2007. North West Weeds : \*Cochineal\*](#)

**Summary:** Available from: <http://www.northwestweeds.nsw.gov.au/cochineal.htm> [Accessed 25 October 2008]

[Pacific Island Ecosystems at Risk \(PIER\), 2006. \*Opuntia monacantha\* \(Willd.\) Haw., Cactaceae](#)

**Summary:** Available from: [http://www.hear.org/Pier/species/opuntia\\_monacantha.htm](http://www.hear.org/Pier/species/opuntia_monacantha.htm) [Accessed 10 December 2008]

[United States Department of Agriculture - Agricultural Research Service \(USDA-ARS\). 2008. Taxon: \*Opuntia monacantha\* Haw. National Genetic Resources Program. Germplasm Resources Information Network - \(GRIN\) \[Online Database\]. National Germplasm Resources Laboratory, Beltsville, Maryland](#)

**Summary:** Available from: <http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?25858> [Accessed 25 October 2009]

[United States Department of Agriculture - Natural Resources Conservation Service \(USDA-NRCS\). 2008. \*Opuntia monacantha\* \(Willd.\) Haw. common pricklypear. The PLANTS Database \(<http://plants.usda.gov>, 5 November 2008\). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.](#)

**Summary:** Available from: <http://plants.usda.gov/java/profile?symbol=OPMO5> [Accessed 25 October 2009]