Parthenium hysterophorus 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Asterales	Asteraceae

Common name fausse camomille (French, New Caledonia), whitetop weed (English), congress grass (English), Santa Maria feverfew (English), Karottenkraut (German), ragweed parthenium (English), parthenium weed (English)

Synonym *Parthenium lobatum* , Buckl.

Similar species

Summary Parthenium hysterophorus is an annual herb that aggressively colonises disturbed sites. Native to Mexico, Central and South America, Parthenium hysterophorus was accidentally introduced into several countries including Australia, India, Taiwan and Ethiopia. In some areas it has become an extremely serious agricultural and rangeland weed. Parthenium hysterophorus is also known to be allergenic to some people and consumption by livestock can taint meat.

view this species on IUCN Red List

Species Description
An erect ephemeral herb known for its vigorous growth. It is light green with branching stems, finely lobed leaves and grows up to 1.5 metres, occasionally reaching 2m in deep rich soils. Young plants form a basal rosette of strongly dissected leaves that are up to 30cm in length. Once stem elongation is initiated, smaller leaves are produced and the plant becomes much-branched in its extremities.

Lifecycle Stages
Germination temperatures for *Parthenium* occur across the 8 to 30° C range with the optimum germination temperature being 22 to 25° C. Persistence tests demonstrated that more than 70% of parthenium seeds buried at 5cm below the soil surface survived for at least 2 years whereas surface-lying seeds survived for no longer than 6 months. Parthenium weed seeds were found to be very persistent in the soil and there was relatively little change in their abundance over an 18 month period. The germination rate of parthenium weed seeds was also significantly faster than that of all other species present (Sheldon Navie, 2003).

Reproduction
Sexual reproduction.
Highly prolific. An average plant can produce 15,000 seeds and large plants are known to produce 100,000 seeds.

General Impacts
Infestations of parthenium weed can degrade natural ecosystems. The plant can produce serious allergenic reactions in humans. Parthenium aggressively colonises disturbed sites and has major impacts on pasture and cropping industries, spreading to and impacting on new\r\nareas.
Outcompetes native species, in part due to allelopathy.

Management Info
Control of parthenium weed can be managed using a combination of methods depending on the site, including biological control agents, pasture management, cultivation and chemicals.
\r\nPreventative measures: Emphasis must be laid on establishing detection/monitoring procedures and stopping the spread of parthenium weed *via* vehicles and as a contaminant. A Risk assessment of *Parthenium hysterophorus* for Australia was prepared by Pacific Island Ecosystems at Risk (PIER) using the Australian risk assessment system (Pheloung, 1995). The result is a score of 18 and a recommendation of: reject the plant for import (Australia) or species likely to be a pest (Pacific).
The Parthenium weed management book provides information on management and control aspects including spread minimization, pasture management, herbicide use, biological control and health aspects. It also describes the parthenium weed and provides basic information about its ecology and biology, reproduction and spread, current distribution, and potential threat. The Weed Control Methods Handbook provides you with detailed information about the tools and techniques available for controlling invasive plants, or weeds, in natural areas. This Handbook is divided into eight chapters, covering a range of different control methods: manual, mechanical, promoting competition from native plants, grazing, biocontrol, herbicides, prescribed fire, solarization, flooding, and other, more novel, techniques. Each control method has advantages and disadvantages in terms of its effects against the target weed(s), impacts to untargeted plants and animals, risks to human health and safety, and costs.
Biological: Biological control using insects and fungi is being pursued in Australia and in India.

Pathway
Thought to have been introduced into Ethiopia and India with contaminated cereal grainThought to have been introduced into Australia in contaminated pasture seed from the USA.

Principal source:

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: Dr. Rachael MacFadyen, Queensland Department of Natural \ Resources, Australia. William Overholt, International Centre of Insect Physiology and Ecology, Nairobi, Kenya.

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ALIEN RANGE

[1] ATLANTIC - WESTERN CENTRAL
[1] BERMUDA
[1] FRENCH POLYNESIA
[1] MADAGASCAR
[1] NEW CALEDONIA
[1] REUNION
[1] SWAZILAND
[1] UNITED STATES
[1] AUSTRALIA
[1] ETHIOPIA
[1] INDIA
[1] MAYOTTE
[1] PAPUA NEW GUINEA
[1] SOUTH AFRICA
[1] TAIWAN

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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.
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