Acacia confusa

System: Terrestrial

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<tr>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
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<td>Plantae</td>
<td>Magnoliophyta</td>
<td>Magnoliopsida</td>
<td>Fabales</td>
<td>Fabaceae</td>
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Common name
acacia petit feuille (English, Seychelles), boiffuring (English, Guam), formosa acacia (English), formosa koa (English), ianangi (English), mimosa (English, Seychelles), pilampwoia (English, Pohnpei), shoshi (English, Guam), small Philippine acacia (English), sosigi (English, Guam), yanoangi (English, Palau), boiffuring (Chamorro, Commonwealth of the Northern Mariana Islands), soshigi (Chamorro, Commonwealth of the Northern Mariana Islands), soschghi (Carolian, Commonwealth of the Northern Mariana Islands), sosigi (Chamorro, Commonwealth of the Northern Mariana Islands), sosugi (Chamorro, Commonwealth of the Northern Mariana Islands), ianångi (English, Palau)

Synonym
Acacia richii, auct. Non A. Gray
Racosperma confusum, (Merr.) Pedley

Similar species

Summary
Acacia confusa, a native of northern Philippines, has been introduced to many places throughout Asia and the Pacific. Being well suited to warm moist environments it has become invasive in many of the places of introduction, including Hawai‘i and the Northern Mariana Islands and shows potential to become invasive in others, including Micronesia and Palau. It would probably be wise not to introduce this species to islands where it is not already present.

view this species on IUCN Red List

Species Description
Small tree; adult foliage of falcate phyllodes, juvenile and sucker-shoot foliage of bipinnate leaves; trunk up to 1m thick in very old trees; phyllodes alternate, coriaceous, parallel-curving-veined, 8-10cm long, narrowed at both ends; flowers yellow, in small globose heads 6-8mm in diameter; heads 1 or 2 in axil of phylloide; pods few together, linear or somewhat curved, flat or slightly twisted, brown, 5-10cm long, 1cm broad or a little more or less, with about 8 seeds; seeds compressed, brown (Stone, 1970, in PIER, 2002). The leaves are apparently allelopathic since the ground underneath these trees is free of weeds, (© 1999-2003 Shaman Australis Botanicals).
Notes

*Acacia confusa* is being planted in Micronesia. It is a major pest elsewhere. While little reproduction was noted in planted stands, the species should be monitored for invasive behaviour. It would probably be wise not to introduce the species to islands where it is not already present, (PIER, 2003). An older (probably pre-war) tree was observed in limestone forest on Saipan with no reproduction and a native forest understory, which would indicate limited invasiveness. Some naturalising was noted on Rota. (PIER, 2003)

Uses

Medicinal/culinary uses. (Thomas & Randall)

Habitat Description

“This thorny, deciduous shrub grows to 4 metres in height, sometimes forming impenetrable thickets, although in most areas it forms a more open cover” (Smith, 1985. In PIER, 2002).

“Erect much-branched shrub; leaves with 4-8 pairs of pinnae, pinnae with 10-12 pairs of small asymmetric leaflets; stipular thorns straight and slender; flowers in pedunculate axillary heads, 1-3 heads together, subglobose; flowers yellow, fragrant; heads about 1-1.5cm across; stamens numerous; pods dark brown or black, up to 8cm long, to 12mm broad, plump, often slightly curved; pulp within sweetish; seeds compressed, elliptic, brown” (Stone, 1970, in PIER, 2003) (differences according to Paiva, 1999).

Reproduction

Seeds present in the ground can germinate profusely after fire. Can reproduce from cuttings. Spread through forestry and ornamental plantings. (PIER, 2003)

General Impacts

*Acacia confusa* forms monotypic stands (PIER, 2003).
Management Info
Preventative measures: A Risk Assessment of Acacia confusa for Hawai‘i and other Pacific islands was prepared by Dr. Curtis Daehler (UH Botany) with funding from the Kaulunani Urban Forestry Program and US Forest Service. The alien plant screening system is derived from Pheloung et al. (1999) with minor modifications for use in Pacific islands (Daehler et al. 2004). The result is a score of 10 and a recommendation of: "Likely to cause significant ecological or economic harm in Hawai‘i and on other Pacific Islands as determined by a high WRA score, which is based on published sources describing species biology and behaviour in Hawai‘i and/or other parts of the world."

Chemical: Saplings sensitive to foliar application of 2,4-D at 1 lb/acre and of triclopyr at 1 lb/acre in a trial at Wailua, Kauai. Triclopyr at 2 lb/acre provided 80% control but 2,4-D at 2 lb/acre caused moderate injury and metsulfuron at 0.4 oz active/acre was ineffective at Kala‘e, Molokai. Somewhat tolerant of dicamba. Sensitive to cut-surface applications of 2,4-D, dicamba, glyphosate, picloram (45) and triclopyr in trials at Wailua, Kauai. However, in trials at Kala‘e, Molokai, results were less impressive with picloram and dicamba providing serious but not lethal injury and glyphosate and 2,4-D providing moderate injury to Formosan koa. Sensitive to very-low volume basal bark application of 20% triclopyr in oil. Staff at the Hawaii Volcanoes National Park (HAVO) used triclopyr ester at 5% of product in diesel oil applied to the basal bark (Chris Zimmer, HAVO). Tolerant of tebuthiuron pellets (Motooka et al., 2002 in PIER, 2003). The weed control appendix provides information on chemical, mechanical, physical, biological management options for this species. Information on species description and environmental impacts is also available.

Pathway
Was planted for windbreaks on Maui, Hawaii. (PIER, 2003)

Principal source: Pacific Islands Ecosystems at Risk, (PIER, 2003) Acacia confusa

Compiler: IUCN/SSC Invasive Species Specialist Group (ISSG)

Review:

Publication date: 2006-03-23

ALIEN RANGE
[1] GUAM
[3] JAPAN
[1] MAURITIUS
[5] NORTHERN MARIANA ISLANDS
[1] SEYCHELLES

[2] INDONESIA
[2] MALAYSIA
[3] MICRONESIA, FEDERATED STATES OF
[5] PALAU
[3] UNITED STATES

BIBLIOGRAPHY
7 references found for Acacia confusa

Management information

Summary: A study on the use of a screening system to assess proposed plant introductions to Hawaii or other Pacific Islands and to identify high-risk species used in horticulture and forestry which would greatly reduce future pest-plant problems and allow entry of most nonpests.

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.

PIER (Pacific Island Ecosystems at Risk), 2002. Acacia confusa

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


Summary: The weed control table is an appendix of I Ho ola I Ka Nahele: To Heal A Forest A Mesic Forest Restoration Guide for Hawaii. The manual provides information on the basic principles, methods, and techniques of managing mesic forests in particular and terrestrial native Hawaiian ecosystems in general. Many of the technical recommendations in this manual stem from five years of mesic forest restoration work at The Nature Conservancy’s Honouliuli Preserve on Oahu. Most of the resource management recommendations are gleaned from the published works and personal communications of those who have worked for over twenty years in the field of conservation biology. The contents of the manual can be viewed at Source information

General information


Summary: Taxonomic information, plus a wide range of distribution information and some uses also.


ITIS (Integrated Taxonomic Information System), 2004. Online Database Acacia confusa

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.