**Sphagneticola trilobata**

**System:** Terrestrial

<table>
<thead>
<tr>
<th>Kingdom</th>
<th>Phylum</th>
<th>Class</th>
<th>Order</th>
<th>Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plantae</td>
<td>Magnoliophyta</td>
<td>Magnoliopsida</td>
<td>Asterales</td>
<td>Asteraceae</td>
</tr>
</tbody>
</table>

**Common name**

ut m Hayden (English, Marshall Islands), wedelia (English), creeping ox-eye (English), trailing daisy (English), Hasenfuss (German), Singapore daisy (English), ut teia (English, Marshall Islands), ngesir ngebi (Palauan), dihpw ongohng (English, Pohnpei), tuhke ongohng (English, Pohnpei), rosranrang (English, Kosrae), atiat (Puluwat), ate (Tongan)

**Synonym**

*Acmelea brasiensi*, Spreng.
*Acmelea spilanthoides*, Cass.
*Buphthalmum repens*, Lam.
*Buphthalmum strigosum*, Spreng.
*Wedelia brasiensi*, S.F.Blake
*Verbinesa carnosa*, M.Gómez
*Verbinesa carnosa*, M.Gómez var. *triloba*(Rich.) M.Gómez
*Complaya trilobata*, (L.) Strother
*Polynia carnosa*, Poir.
*Seruneum paludosum*, (DC.) Kuntze
*Seruneum trilobatum*, (L.) Kuntze
*Silphium trilobatum*, L.
*Sphagneticola ulei*, O.Hoffm.
*Stemmodontia trilobata*, (L.) Small
*Thelechitonia trilobata*, (L.) H.Rob. & Cuatrec.
*Wedelia crenata*, Rich.
*Wedelia paludicola*, Poepp. & Endl.
*Wedelia paludosa*, DC.
*Wedelia triloba*, (Rich.) Bello
*Wedelia trilobata*, (L.) Hitchc.
*Verbinesa carnosa*, M.Gómez var. *aspera*(Rich.) M.Gómez

**Similar species**

Although *Sphagneticola trilobata* is the accepted name for this species, it is widely known as *Wedelia trilobata*. *Sphagneticola trilobata* is native to the tropics of Central America and has naturalised in many wet tropical areas of the world. Cultivated as an ornamental, it readily escapes from gardens and forms a dense ground cover, crowding out or preventing regeneration of other species. In plantations, it will compete with crops for nutrients, light and water, and reduce crop yields.

[view this species on IUCN Red List](https://www.iucngisd.org/gisd/species.php?sc=44)
Species Description
Creeping, mat-forming perennial herbs; stems rounded, rooting at the nodes, 1-3 (-4) dm long, the flowering portions ascending, coarsely strigose to spreading hirsute, sometimes subglabrous. Leaves fleshy, usually 4-9 cm long, (1.5-) 2-5 cm wide, irregularly toothed or serrate, usually with a pair of lateral lobes. Peduncles 3-10 cm long; involucre campanulate-hemispherical, ca. 1 cm high; chaffy bracts lanceolate, rigid; ray florets often 8-13 per head, rays 6-15 mm long; disk corollas 4-5 mm long; pappus a crown of short fimbriate scales. Achenes tuberculate, 4-5 mm long, few achenes maturing in cultivated plants in Hawaii. (Wagner et al, 1990)

Notes
Although *Sphagneticola trilobata* is the accepted name for this species, it is widely known as *Wedelia trilobata*.

Uses
Used commonly as an ornamental plant and groundcover.

Habitat Description
*Sphagneticola trilobata* has a very wide ecological tolerance range, and seems to be equally suited to dry and moist sites. Although it seems to prefer and do best in sunny sites, it survives very well in shady sites. It grows well on almost all soil types, including bare limestone and nutrient poor sandy beaches and swampy or waterlogged soils. It is tolerant to inundation and high levels of salinity (Thaman, R.R. 1999). *Wedelia* is found in open areas with well-drained, moist soil up to 700 m or more in elevation (up to 1300 m in French Polynesia). It can tolerate dry periods. A noxious weed in agricultural areas, along roadsides and trails, in open lots, wastelaces and garbage dumps and other disturbed sites. Also naturalized and invasive along streams, canals, along the borders of mangroves and in coastal strand vegetation (PIER, 2003).

Reproduction
Usually vegetatively. Stems form new plants where they touch the ground and pieces readily take root. Plants usually develop few fertile seeds. Commonly spread by dumping of garden waste, (PIER, 2003).

Nutrition
Although it seems to prefer and do best in sunny sites, it survives very well in shady sites also. It grows well on almost all soil types, including bare limestone and nutrient poor sandy beaches and swampy or waterlogged soils. It is tolerant to inundation and high levels of salinity (Liebregts, 2001).

General Impacts
If *Sphagneticola trilobata* becomes established in plantations, it will compete with crops for nutrients, light and water, and reduce crop yields. It rapidly escapes from gardens to roadsides and plantations, where it can overgrow plants and develop into a thick cover (Niue D AFF, 2001). Forms a dense ground cover, crowding out or preventing regeneration of other species (PIER, 2003).
Management Info

Preventative measures: It is suggested that planting of this species be banned, except where it can be contained, and that dumping of garden waste on vacant lots be prohibited.

A Risk Assessment of *Sphagneticola trilobata* (*Wedelia trilobata*) for Hawai‘i and other Pacific islands was prepared by Dr. Curtis Daehler (UH Botany) with funding from the Ka'ulunani 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 13 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."

A Risk assessment of *Sphagneticola trilobata* (*Wedelia trilobata*) for Australia was prepared by Pacific Island Ecosystems at Risk ([PIER](https://www.pier.com.au)) using the Australian risk assessment system (Pheloung, 1995). The result is a score of 6 and a recommendation of: reject the plant for import (Australia) or species likely to become a pest (Pacific).

Physical: The Land for Wildlife program south-east Queensland, recommends 'scarifying' for small patches of soil dominated by weeds like wedelia - the top few centimetres of soil are removed using a suitable tool such as a fire hoe. The aim is to remove soil-stored seed. Do not leave disturbed area open for reintroduction of weeds. Mowing or slashing of wedelia infested areas should be avoided as this may cut the plants into smaller pieces that can develop into new plants, and increases the risk of spreading to new areas, (Liebregts, 2001).

Chemical: Langeland and Stocker (2000), suggest treating small patches with 2% Roundup; and large, dense populations by broadcast-spraying 5% Roundup (with follow-up treatments as needed). Or 1/4-1.0% Garlon 4 in water.

Pathway

Brought from Hawaii to Pohnpei by women down at the Catholic mission around 1970 who thought it would look nice in their gardens.

Principal source: Pacific Islands Ecosystems at Risk, ([PIER](https://www.pier.com.au))

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:

Publication date: 2010-10-04

**ALIEN RANGE**

1. AMERICAN SAMOA
2. BERMUDA
3. COOK ISLANDS
4. CONGO, THE DEMOCRATIC REPUBLIC OF THE
5. FRENCH POLYNESIA
6. INDONESIA
7. MAYOTTE
8. NAURU
9. NEW GUINEA
10. NORTHERN MARIANA ISLANDS
11. SAMOA
12. UNITED STATES
13. VANUATU

1. AUSTRALIA
2. CONGO, THE DEMOCRATIC REPUBLIC OF THE
3. FIJI
4. GUAM
5. MARSHALL ISLANDS
6. MICRONESIA, FEDERATED STATES OF
7. NEW CALEDONIA
8. NIUE
9. PALAU
10. TONGA
11. UNITED STATES MINOR OUTLYING ISLANDS

**BIBLIOGRAPHY**

GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: Sphagneticola trilobata

28 references found for Sphagneticola trilobata

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.


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 PDF 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: Details of the eradication programme in Niue.


PIER (Pacific Island Ecosystems at Risk), 2003. Wedelia trilobata

Summary: Ecology, synonyms, common names, distributions (Pacific as well as global), management and impact information. Available at: http://www.hear.org/pier/species/wedelia_trilobata.htm [Accessed 13 May 2004].

Proposal for an Eradication Campaign of Sphagneticola trilobata in Niue. Pest Management in the Pacific, Component 7: Cook Islands, Niue and Tokelau.

Summary: Details on distribution, impacts and proposal for the eradication of wedelia in Niue.


Summary: This paper is a preliminary account of the status in the Pacific Islands of Wedelia trilobata (L.) Hitch., a recently introduced ornamental groundcover plant that has become an extremely invasive weed in many areas, and has the potential to become one of the most environmentally destructive weeds of the Pacific Islands. It is suggested that Wedelia trilobata should be immediately declared a serious noxious weed, should be restricted from introduction into new islands and habitats, and, where possible, should be exterminated from islands and habitats where it has not gained a foothold.

The paper describes Wedelia trilobata and discusses what is known about its introduction and spread in some island countries, the habitats in which it thrives and has become naturalized or invasive, and the present and potential threat that it poses to island ecosystems and indigenous species. Actions are suggested that could be taken to control the introduction and spread of Wedelia trilobata to islands and habitats where it does not yet exist, and to eradicate it from areas where it is not yet out of control.


Summary: This database compiles information on alien species from British Overseas Territories.


Wedelia Progress report July 2001

Summary: A progress report on the eradication of wedelia programme in Niue.

Wedelia Progress report March 2001

Summary: A progress report on the eradication of wedelia programme in Niue.

Wilson, Colin, Wildlife Management Officer, Department of Infrastructure, Planning and Environment, Parks & Wildlife Service, Northern Territory, Australia.

Summary: Compiler of original GISD profile of Chromoleana odorata.

General information
Barthelat, F. 2005. Note sur les espèces exotiques envahissantes Mayotte. Direction de Agriculture et de la Forêt. 30p


Summary: Habitat of S. trilobata in Micronesia.


Summary: Accounts of the flora of Central America.


Summary: Accounts of the flora of French Polynesia, including notes on wedelia.
ITIS (Integrated Taxonomic Information System), 2005. Online Database Sphagneticola trilobata

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:
[Accessed March 2005]


Summary: Accounts of the flora of the Marshall Islands, including notes on the presence, introduction and spread of wedelia.


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


Summary: Notes on wedelia in Hawaii.


Summary: Notes on hybridisation.


