Anredera cordifolia 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Caryophyllales	Basellaceae

Common name tapau (English), parra de Madeira (Spanish), 'uala hupe (English), enredadera del mosquito (Spanish), anredera (English), filikafa (English), heartleaf madeiravine (English), mignonette vine (English), Gulf madeiravine (English), lamb's tails (English), Madeira vine (English)

Synonym *Boussingaultia cordifolia*
Boussingaultia gracilis
Boussingaultia pseudobasselloides

Similar species

Summary Anredera cordifolia, commonly known as Madeira vine is a succulent climbing vine. The combination of fleshy leaves and thick aerial tubers makes this a very heavy vine. It smothers trees and other vegetation it grows on and can easily can break branches and bring down entire trees on its own. *A. cordifolia* is notoriously difficult to control.

view this species on IUCN Red List

Species Description
Anredera cordifolia is an evergreen climber that grow from fleshy rhizomes. It has bright green, heart-shaped, shiny leaves. Wart-like tubers are produced on aerial stems and are a key to identifying the plant. It has masses of fragrant, cream flowers. The plant spreads *via* the tubers, which detach very easily (The Bay of Plenty Regional Council, UNDATED). \"PEIR (2005) describes *A. cordifolia* in more detail: Stems are slender and often have a reddish colour to them. The leaves are subsessile and can commonly be found with small irregular tubers in their axils. Lamina are broadly ovate. Racemes can be simple but also show some branching. Pedicels are 2-3mm long; bracts 1.5-1.8mm long. The lower bracteoles can be 0.5-1mm long and are cupulate. The upper bracteoles are around 2-2.5mm long and suborbicular.

Uses
Starr *et al.* (2003) state that, \"*Anredera cordifolia* is a fast growing twiner with succulent leaves and fragrant white flowers. It can be trained to twine up trellises, fences, or rock walls for decoration or for screening.\"

Habitat Description
In Australia *A. cordifolia* has can be found invading riparian vegetation, the edges of rainforest, tall open forests, damp sclerophyll forests. It is also spreading amongst a number of tropical Pacific Islands (PEIR, 2005).

Reproduction
Anredera cordifolia can reproduce through the proliferation of tubers and also from rhizome fragments that may be broken off. Although this species has both male and female flowers they rarely reproduce sexually and produce seed. This species often spreads through its own vegetative growth, but can easily be transported by human activities. If fragments end up in waterways, they are easily transported to new locations in this manner (Starr *et al.* 2003).

General Impacts
Harden *et al.* (2004) report that, \"*Anredera cordifolia* proliferates readily from small vegetative parts of the plant and as a result is very hard to kill and eradicate from forestland.\" Starr *et al.* (2003) report that, \"*A. cordifolia* has several characteristics that contribute to its invasiveness, including a history of weediness in warm, moist climates, aggressive vegetative growth which competes with and replaces other vegetation, and difficulty of control once established. Its aggressive vining nature gives it the potential to smother other desirable plants. Growth rates of stems in warmer and moister regions can exceed 1 metre per week and up to 6 metres in a growing season. According to the Lismore County Council in Australia (LCC 2001) \"With fleshy leaves and aerial tubers, *A. Cordifolia* is one of the heaviest of problem vines. Its sheer weight is capable of breaking branches off trees, thereby reducing them to poles, potentially causing collapse of the rainforest canopy.\" Control of this species is difficult because both underground and aboveground tubers must all be destroyed or removed.\" Harden *et al.* reports on some of the problems faced from *A. Cordifolia* tubers stating that, \"Not only was it the most destructive species but it also proved the most difficult to eradicate owing to the formation of terrestrial, and small and large aerial, tubers (to 25cm diameter) on the stems, often held high in the canopy. Even after 15 years of treatment, aerial tubers of *A. Cordifolia* were still held high on dead stems caught in the restored forest canopy in only a few isolated areas of the Brush.\"

Management Info
Physical: Starr *et al.* (2003) state that, \"Physical control of *Anredera cordifolia* is very difficult. Wildy (2002) suggests placing a plastic sheet below the plant before any manual control is done so that all parts of the plant, especially aerial tubers, can be removed. All parts of the vine must be removed, including underground tubers and vines climbing up trees to prevent them from resprouting.\"
Chemical: Starr *et al.* (2003) state that, \"The vine is hard to kill with chemicals due to its numerous tubers, suculent waxy leaves, and numerous roots. Haley (1997) recommends that after all tubers are physically removed, use a foliar spray of Escort, Roundup, and Pulse on plants and tubers as soon as green sprouts have two or four leaves on each sprout. Timing of follow spraying is important because if left too long, new underground tubers will form, prolonging successful control. Wildy (2002) suggests trying a foliar spray of Garlon 4 (triclopyr) mixed with water 50 ml/10 l. Australians (LCC 2001) report that scraping stems at staggered intervals then applying 100% Roundup (glyphosate) is the only recommended control method. Aerial stems should be cut at both ends and dipped in Roundup (Bushcare 2001).\"
In Ku-ring-gai (NSW Australia), Pallin (2000) states that efforts have been made to apply annually, \"Herbicide by the stem-scrape method, to kill vines in situ and (particularly in the case of *A. cordifolia*) to kill existing aerial tubers and prevent the development of more. *A. cordifolia* tubers were picked from the soil once native seedlings began to regenerate and removed to landfill. *A. cordifolia* regrowth was spot sprayed with herbicide where there were no native seedlings. Although floods bring more *A. cordifolia* tubers from upstream sources into the Reserve, this strategy has almost eliminated the production of tubers within the Reserve and thus protects the regenerating areas and bushland downstream in Garigal National Park from this threat.\"
Prior and Armstrong (2001) achieved various levels of control against *A. cordifolia* using a variety of concentrations of both fluroxypyr and glyphosate, but the authors favoured fluroxypyr treatments because at lower concentrations competitive grass species can also establish and compete with *A. cordifolia*.
The Bay of Plenty Regional Council (UNDATED) states that, \"Smaller *A. cordifolia* plants can be grubbed out ensuring that all of the tubers are removed. Larger infestations can be controlled by cutting back top growth and spraying remaining 2 metre stems with Escort® 5 grams per 10 liters of water plus penetrant, or Grazon® at 60mls per 10 litres of water plus penetrant.\"
Cultural: Starr *et al.* (2003) states that, \"It could be suggested that the public not plant or spread plants to new areas. Tubers and parts of the plant could be double bagged and thrown away in the trash or piled in one location on site. Precaution could be taken to not spread green waste to uninfected areas.\"

Pathway
Anredera cordifolia is spread by people in landscaping efforts, both intentionally and unintentionally. The vine escapes from cultivation spreading vegetatively and through pieces of rhizome and stem tubers that separate from the parent plant (Star*Anredera cordifolia* has escaped from cultivation to become a serious pest in many places where it has been planted, including Hawai'i, Australia, New Zealand, South Africa, and other Pacific Islands (Starr *et al.* 2003).

Principal source: Starr *et al.* 2003. *Anredera cordifolia*

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[5] COOK ISLANDS
[1] FIJI
[1] HONDURAS
[1] MEXICO
[1] PORTUGAL
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[1] SPAIN
[15] UNITED STATES

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