

# Grand Balloon Vine

# Invasive Species in the Cook Islands

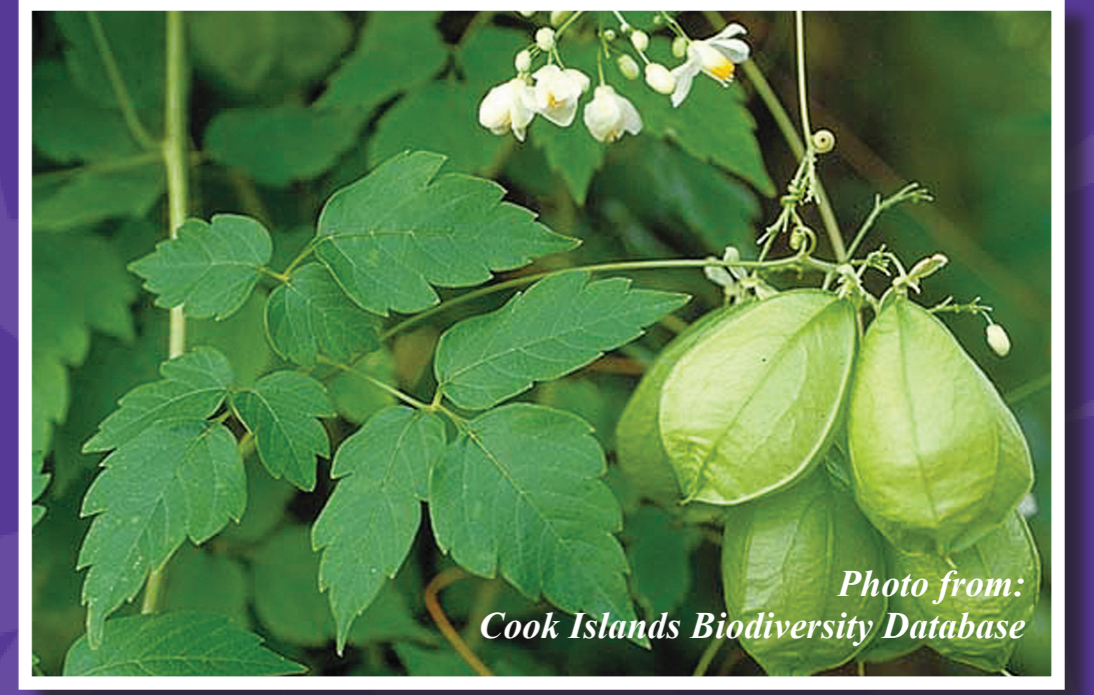


Photo from:  
Cook Islands Biodiversity Database



Photo from:  
NES Officer - E Munro



Photo from:  
NES Officer - E Munro

Sci name: *Cardiospermum grandiflorum* Local name: *Kōpūpū taviri*

#### General information

Balloon vine is named after its fruits, which occur as inflated capsules with pointed tips. It is a densely-growing, climbing plant that grows up to 8m high in the canopy. Balloon vines smother other plants and prevent them from receiving the sunlight they need to photosynthesise. It is commonly found along waterways, roadsides, mountains and in disturbed sites. The edges of the forest are likely sites for invasion, and the vines will often grow right into the canopy of the trees.

#### Cook Islands status

Balloon vines have been in the Cook Islands since the 1920s. There are two varieties of balloon vine in the Cook Islands, Grand balloon vine and small balloon vine. Small Balloon-Vine *Cardiospermum halicacabum* is only found on Mitiaro and Grand balloon vine is only found along the coast and mountains of Rarotonga.

#### Key feature

- The leaves are made up of nine leaflets with toothed margins
- Flowers are small and white which flowers throughout most of the year and grows in clusters with tendrils at the base
- Its very distinctive large, balloon-shaped, papery capsules with three compartments, each containing a single heart-shaped seed.

#### Impact

Balloon vine grows rapidly into the tops of trees and can smother and kill trees, shrubs and ground cover plants by forming a thick curtain of stems and leaves which excludes light from plants below. The weight of balloon vines can also contribute to canopy collapse and ecosystem destruction.

#### Management

Balloon vines can be manually removed by cutting at the base of the plant to enable the top part to die off after. Roots must be dug out as they tend to regrow.

Chemicals such as paraquat can be used however chemical control could be problematic for non-targeted plants and chemicals may cause environmental contamination.

The use of appropriate biological control agents to control balloon vine is a healthier and better option for the environmental.

#### Why it is important to control and prevent further invasion by balloon vines?

Balloon vines can have a major impact on the environment, threatening local endemic and native plants. They can cause ecological damage by competing with native species which can lead to decline in numbers or even extinction of these species.

*Stop the spread of this plant to the Pa Enua*

# Kōpūpū Taviri

# Rakau Kikimo tuitarere i te Kuki Airani



Sci name: *Cardiospermum grandiflorum* Common name: *Balloon Vine*

### Eaa teia rakau ko te kōpūpū taviri?

E ngāngā'ere toro e te viviki i te tupu te kōpūpū taviri. Ka tupu aia na runga i te au tumu rakau, tamarumaruru atu i te reira. E kitea ia ana te kōpūpū taviri e tupu rerevao ara na runga i te tumu rakau takapini ia Rarotonga. E rua tu kōpūpū taviri e kitea ia ana i roto i te Kuki Airani. Ko te kōpūpū taviri 'ua mamaata e te kōpūpū taviri ua rikiriki. Te kōpūpū taviri ua rikiriki e kitea ia ana te reira ki runga ia Mitiaro ko te ua mamaata tei runga ua ia Rarotonga. No te mataiti 1920 i kitea mua ia ei te kōpūpū taviri i roto i te Kuki Airani. E kitea ia ana te kōpūpū taviri 'ua mamaata e tupu rerevao ara takapini ia Rarotonga.

### Mei te 'aa rai te tu o te Kōpūpū taviri

- Te kōpūpū taviri e taki 3 putunga 3 rau rikiriki e kitea ia ana i runga i te kakau okotai. Te katoa'anga i te rau rikiriki i runga i te atava okotai, e 9 te reira.
- Tona puera e puera ana i te au marama katoatoa, e puera teatea rikiriki. Ka pū'ākato tona puera me tupu mai e tetai kata taviri i raro ake i te puera pū'ākato.
- E 'ua tuke uatu rai to te kōpūpū taviri. Ka kōpū tona 'ua e me maro mei te peapa rai tona tu me amiri koe.

### Te manata tana ka rave

E ngāngā'ere toro viviki e te tupu rerevao na runga i te au tumu rakau. Ka tāmamanatā aia i te tupu'anga o te rakau enua, na roto i te kukumi'anga e te tamarumaruru'anga i te au tumu rakau. E ati ana te tumu me kore te atava rakau i te kōpūpū taviri no te maata e te teima'a o tona au atava.

### Ravenga no te tāmāte me kore akaiti i te toto'a anga o te kōpūpū taviri

Ka rauka ia koe i te tipu me kore pari i te au rara rakau o te kōpūpū taviri, kia mate atu te atava e tupu ara na runga i te tumu rakau me kore te kao o te kōpūpū taviri. Ka anoano ia rai koe kia kiriti me kore u'uti i te tumu ki vao mei roto mai i te one, kia kore te reira e tupu akaou. Ka rauka katoa te vairakau tamate tita i te tā'anga'anga no te tāmāte atu i te kōpūpū taviri, te manata i konei ko te kino tate vairakau ka rave ki te ao ora natura, pera katoa te ka riro i te tāmāte atu i tetai rakau kare koe e inangaro i te tāmāte atu. Me tā'anga'anga koe i te vairakau tāmāte tita, kia tatau e kia aru meitaki koe i te tātā'anga no te tā'anga'anga atu i teia vairakau kia kore koe e te ao ora natura e ō ki roto i te manamanatā.

### Eaa tatou ka matakite ei i te kōpūpū taviri?

Te kōpūpū taviri ka tāmamanatā atu aia i te turanga o te rakau enua, pera tikai te tupu'anga, e te piri'anga o te au apinga ora mei tetai ki tetai. Ka riro katoa te kōpūpū taviri i te tāmamanatā e te takore takiri atu i te au katiri rakau tupuna i runga i to tatou enua.

*Auraka e toto'a atu te Kōpūpū taviri ki te Pa Enua.*