

Weed Spotters' Network Queensland

Bulletin
August 2015



National Science Week 15-23 August 2015

Don't forget to register for [National Science Week](#) events including the Queensland Herbarium's free [Triffid hypothetical in](#) Brisbane, 6.30pm Tuesday 18 August. [Free tickets](#) are still available.



The first week of September is Weedbuster Week

Weedbusters is an awareness and action program that aims to protect Queensland's environment, agriculture and other industries from weeds. Weedbusters aims

to raise awareness about weeds and their impacts, and involve people in weed management. Landcare groups, state and local governments, schools and other community groups participate in Weedbusters each year by holding events as part of **Weedbuster Week**, the first week of September. Events range from weed clean-ups, field days and demonstrations, seminars and displays at shopping centres, libraries and local councils, weed identification walks and school competitions. So why not join in or organise a Weedbuster event in your local area this September? Find out how you can get involved or register an event on the [Weedbusters website](#).

Weed spotter survey

We'd like to improve your experiences as a weed spotter and would love your feedback. If you haven't already, please take a few minutes to complete the [online member survey](#). Thank you.

Upcoming weed spotter training

Cooktown: 1.30 pm – 3.30 pm Wednesday 26 August 2015.

Cairns: 2.00 pm – 4.00 pm Thursday 27 August 2015.

Please email Melinda.Laidlaw@dsiti.qld.gov.au or phone (07) 3896 9323 if you would like to attend.

Weed scientist profile: Steve Csurhes

Steve Csurhes is a Weed Spotter and a Biosecurity Queensland ecologist who has worked on invasive plants and animals for almost 30 years. After studying Agricultural Science at UQ, Steve worked as a research officer on woody weeds followed by 15 years as a policy officer assessing risks associated with thousands of potentially invasive plants and animals. For the past 8 years, Steve has been a Biosecurity Queensland project officer working on a wide range of biosecurity projects, including reviewing Queensland's declared Class 1 species. Steve is passionate about preventing weed invasion through restrictions on possession and sale, surveillance, early detection and eradication.



Class 1 declared plants: *Mimosa pigra* (giant sensitive tree)

Fig. 1. DAF



Mimosa pigra grows as an erect, branched shrub to 6 m in height with a deep tap root. Branches are covered in rose-like thorns 5–10 mm long. Leaves (20–25 cm long) are compound with fine leaflets, giving them a fern-like appearance (fig. 1). The leaf rachis (central stalk) is prickly. Leaves fold up at night and are sensitive, closing up if touched, injured or water stressed. The flowers are pink/mauve, fluffy and round, 1–2 cm in diameter (fig. 2).

Plants can flower when just 2–6 months old. A cluster of up to 30

densely hairy seed pods 6–8 cm long is produced by each flower. These pods can appear when the plant is just 4 months old. These turn brown when mature and break away into segments which are easily spread. These pod segments are hairy and can attach to hair or clothing and can float. Within each pod are 14–26 oblong, flattened seeds each 4–5 mm long and 2 mm wide. A single plant produces up to 220,000 seeds per year. Read more about giant sensitive tree in the [August 2013 bulletin](#).



Fig. 2. NT Government

Class 2 declared plant: *Senecio madagascariensis* (fireweed)



Fig. 3. DAF and Fig 4. (inset) B. Phillips

Fireweed can be difficult to identify as it is highly variable in form and can appear similar to around 9 native species of *Senecio*. When growing under ideal conditions, fireweed can grow as a branching herb reaching 50 cm height with long wide leaves (6 cm x 2 cm) and up to 100 flowers (fig. 3). During dry times, however, it may grow as a short (20 cm) unbranched, narrow leaved herb with very few flowers. Leaves are dark green, alternate and have serrated or finely toothed margins. Upper leaves are nearly always undivided, although lower leaves can sometimes be lobed. The flowers are the best feature for identifying fireweed (fig 4).

Flowers are 2 cm wide and daisy-like, with conspicuous yellow rays which resemble petals that are more than 2 mm long (fig. 4). Directly below the flower, between 18 and 22 green involucral bracts (leaf or scale-like structures) are slightly overlapping and are all approximately the same length (fig. 5). Achenes (seeds) are cylindrical (1.5–2 mm long and 0.3–0.5 mm wide) and are covered in minute hairs. They have a silky pappus (parachute) of hairs which aid their dispersal. Seeds can germinate immediately and the time to seed set can be as little as 6–10 weeks, meaning there can be up to 4 generations produced per growing season. Read more about fireweed in the [August 2014 bulletin](#).

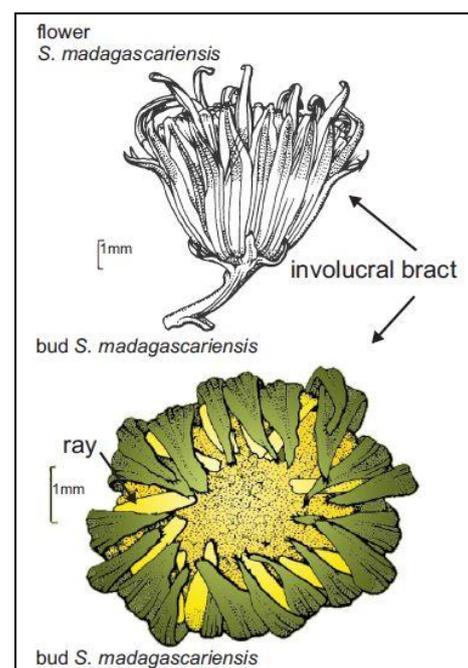


Fig. 5. W. Smith

If you think you have seen giant sensitive tree or fireweed growing in your region, please contact the Queensland Herbarium on (07) 3896 9323, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on 13 25 23.

Class 1 declared plants: *Morella faya* (syn. *Myrica faya*) (fire tree or candleberry myrtle)

Fire tree is native to the islands of Macronesia, including the Azores, Madiera and the Canary Islands (and possibly southern Portugal) where it generally grows from 600–900 m elevation. It is a highly invasive species on the Hawaiian Islands. Fire tree quickly multiplies to form monospecific stands with a sparse understory. It is able to invade a wide range of habitats and grow on almost any soil type.

Fire tree disrupts native ecosystem dynamics by dramatically (up to 4 fold) increasing soil nitrogen levels. Nitrogen limited ecosystems in Queensland are susceptible to invasion by fire tree and other non-native species which are able to fix their own nitrogen.



Fig. 1 Photo: Forest & Kim Starr



Fig. 2 Photo: Forest & Kim Starr

Ecosystems invaded by fire tree also facilitate invasion by other non-native species that are able to out-compete native plants under high nutrient conditions. Although fire tree has not yet been recorded in Australia, it is listed as a Class 1 species in Queensland due to its potential impacts.

Fire tree is a fast growing, evergreen shrub or small tree reaching 3–15 m in height (fig. 1). The leaves are glossy and dark green (fig. 2), 4–11 cm long and 1–3 cm wide. The leaf margin is entire (smooth) or undulating and the apex is bluntly pointed (fig. 2 and 3). Male and female

flowers can occasionally appear on the one tree, meaning one individual can give rise to a new population. Male flowers are produced close to the branches while female flowers occur closer to the branch tips. The flowers are wind-pollinated.

Fire tree fruits are small drupes, like a blackberry, 5–6 mm diameter. They range in colour from a reddish purple to a dark purple or black when ripe. Each tree can produce more than 40,000 fruits per year. These fruits are attractive to birds and can be dispersed long distances. It is estimated that a stand of 21 adult trees can multiply to a population of over 150 mature trees in only one year (Vitousek & Walker 1987).

Reference: Vitousek & Walker (1987) Colonization, succession, and resource availability: ecosystem-level interactions. In: Gray, A., Crawley, M. and Edwards, P. J. (eds), *Colonization, succession and stability*. Blackwell, Oxford, pp. 207-223.



Fig. 3. S. Navie

If you think you have seen fire tree growing in your region, please contact the Queensland Herbarium on (07) 3896 9323, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on 13 25 23.

Keep an eye out for these weeds in August...

Species	Common name	Watch for in this region	Field attributes to look for
# Acaciella glauca (July 2014 bulletin)	redwood	South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Mackay Whitsunday, Torres Strait, Dry Tropics	white ball-shaped flowers, creek lines and dry tropics
# Asparagus asparagoides (September 2013 bulletin)	bridal creeper	Condamine	broad glossy leaves, small white flowers
# Cecropia spp. (April 2013 bulletin)	Mexican bean tree	South East Queensland, Burnett/Mary, Mackay Whitsunday, Torres Strait, Wet Tropics	large lobed leaves with a pale underside
# Clidemia hirta (March 2013 bulletin)	Koster's curse	Mackay Whitsunday, Wet Tropics	leaves hairy with teeth, branchlets with long bristly red hairs
# Cylindropuntia prolifera (August 2014 bulletin)	jumping or coastal cholla	Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland	spines to 2 cm long
# Cylindropuntia tunicata / # C. rosea (July 2013 bulletin)	chain-link cactus/ Hudsons pear	Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland	long spreading spines
# Eichhornia azurea / E. crassipes (October 2014 bulletin)	water hyacinth	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, floating, purple flowers
Elephantopus mollis (March 2015 bulletin)	tobacco weed	South East Queensland, Burnett/Mary	daisy to 1 m tall, flowers white or pink
# Equisetum spp. (July 2013 bulletin)	horsetails	South East Queensland	primitive plant, no flowers, leaves reduced
Heterotheca grandiflora (September 2014 bulletin)	telegraph weed	South East Queensland	daisy to 2 m, flowers yellow
Hymenachne amplexicaulis (June 2013 bulletin)	hymenachne	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	robust grass to 2.5 m, water bodies & drains
# Limnocharis flava (October 2013 bulletin)	yellow burrhead	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	water bodies & margins, yellow flowers & triangular stems
# Miconia calvescens (March 2013 bulletin)	miconia/purple plague	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry tropics	underside of leaves purple

Species (cont.)	Common name	Watch for in this region	Field attributes to look for
# <i>Miconia nervosa</i> (March 2013 bulletin)	miconia	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry tropics	leaves hairy, reddish underside
# <i>Miconia racemosa</i> (March 2013 bulletin)	miconia	Wet Tropics	leaves hairy with teeth, branchlets hairless except at nodes
# <i>Mikania micrantha</i> (November 2013 bulletin)	mikania vine	South East Queensland, Burnett/Mary, Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	heart shaped leaf & smothering habit
# <i>Mimosa pigra</i> (August 2013 bulletin)	giant sensitive tree	South East Queensland, Burnett/Mary, Cape York, Southern Gulf, Northern Gulf, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	fern leaves, rose-like thorns, pink ball-shaped flowers
# <i>Opuntia dejecta</i>	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
# <i>Opuntia elata</i> (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
# <i>Opuntia elatior</i> (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
# <i>Opuntia leucotricha</i> (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
# <i>Opuntia microdasys</i> (June 2014 bulletin)	bunny ears	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	succulent shrub, clustered yellow spines
# <i>Opuntia sulphurea</i> (June 2014 bulletin)	prickly pear	Fitzroy Basin, Desert Channels, South West Queensland, Southern Gulf	spiny succulent shrub
<i>Pistia stratiotes</i> (November 2014 bulletin)	water lettuce	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, resembles a small open lettuce
<i>Pueraria montana var. lobata</i> (February 2015 bulletin)	kudzu	South East Queensland, Burnett/Mary	vine with fragrant purple-pink flowers
<i>Salvinia molesta</i> (November 2013 bulletin)	salvinia	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, leaves with water repellent hairs
<i>Senecio madagascariensis</i> (August 2014 bulletin)	fireweed	Wet Tropics	daisy to 60 cm, flowers yellow

Species (cont.)	Common name	Watch for in this region	Field attributes to look for
# Senegalia insuavis (April 2014 bulletin)	pennata wattle or cha-om	Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics, South East Queensland, Burnett/Mary	pink ball-shaped flowers, prickles along stems
# Senegalia rugata (April 2015 bulletin)	soap pod	Cape York, Mackay Whitsunday, Torres Strait, Wet Tropics	pink ball-shaped flowers, prickles along stems
Solanum viarum (April 2013 bulletin)	tropical soda apple	Burnett/Mary, Fitzroy Basin, Northern Gulf, Mackay Whitsunday, Dry Tropics	variegated cherry tomato, thorny leaves, look in sale yards, abattoirs
# Vachellia karroo (May 2013 bulletin)	karroo thorn	South East Queensland, Fitzroy Basin, Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	long, white, paired thorns
# Vachellia xanthopholea (September 2013 bulletin)	yellow fever tree	South East Queensland, Fitzroy Basin, Desert Channels, Southern Gulf, Northern Gulf	long, white, paired thorns

Class 1 declared plant

Class 1 declared plant: [Cylindropuntia prolifera](#) (jumping or coastal cholla)



Fig. 1

Jumping cholla (pronounced 'choya') grows as a compact shrub to 2 m tall (fig. 1). Stem segments are grey-green, 4–15 cm long and up to 5 cm wide. It is known as 'jumping cholla' due to its ability to appear to 'jump' and attach itself painfully to passing people, animals and vehicles. Jumping cholla segments are covered in prominent tubercles, small raised areas or nodules. Between 7 and 11 spines (1–2 cm long) and small detachable barbed bristles (glochids) grow from pits (areoles) on each tubercle. The spines are light to dark brown with a white to straw coloured sheath firmly attached to them. Flowers appear in spring and fruits form in late summer to autumn.

The flowers are rose to magenta and up to 4 cm wide (fig. 2). Fruits are spineless, pink to red and up to 5 cm long and 3 cm in diameter. The fruits can grow end to end in a chain. Fruits of the jumping cholla are usually sterile and the species spreads by vegetative means. Stem fragments easily detach and then grow roots when in contact with the ground. Fragments can be easily spread by vehicles, clothing, shoes or animals. Read more about jumping cholla in the [August 2014 bulletin](#). Photos: Desert Channels Qld.



Fig. 2

If you think you have seen jumping cholla growing in your region, please contact the Queensland Herbarium on (07) 3896 9323, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on 13 25 23.

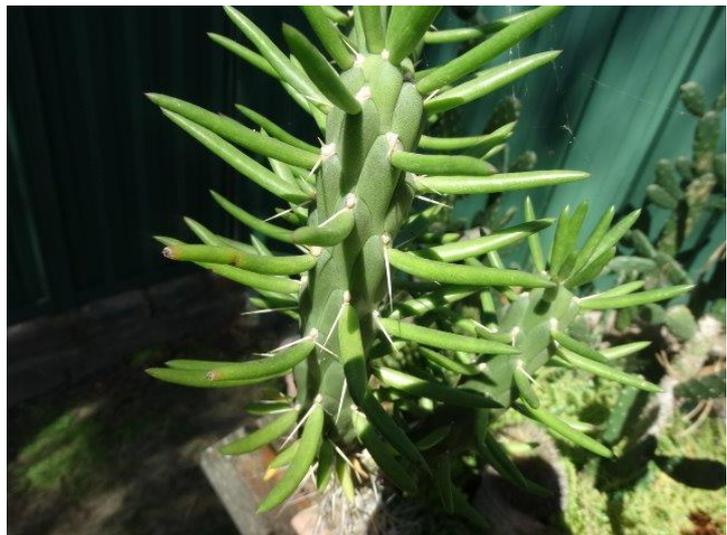
Notifications – July 2015

Finding and reporting emerging weeds which could cause serious environmental, social and economic impacts across Queensland is a critical role of our network. **Putting them on the map** also means we can track their spread and the effectiveness of control measures across the landscape and through time.

If you see a plant in your region which raises your suspicions, please [collect it](#) and bring it to the attention of your regional coordinator and/or the Queensland Herbarium. You can find a full list of the declared plants of Queensland on the [Biosecurity Queensland website](#). (**WONS**=Weed of National Significance; **NAQS**=Northern Australian Quarantine Survey)

1. **WONS** [Austrocyllindropuntia subulata](#) (Muehlenpf.) Backeb. (Eve's pin cactus) from Ashmore, the Gold Coast. Di Webster, City of Gold Coast Council. This is the first record for Queensland, see photos below.
2. **Class 1 weed/NAQS** [Clidemia hirta](#) (L.) D.Don (Koster's curse) from Wooroonooran National Park. Stephen McKenna, Department of Agriculture.
3. **Class 2 weed/WONS** [Cylindropuntia fulgida var. mamillata](#) (Schott ex Engl.) Backeb. (coral cactus) from Moama, north of Eulo. Daniel McCudden, Biosecurity Queensland.
4. **Class 1 weed/WONS** [Opuntia microdasys](#) (Lehm.) Pfeiff. (bunny ears cactus) from Pratten, near Warwick. James Eastwell and Lloyd Hilton, Southern Downs Regional Council.
5. **Class 2 weed/WONS** [Parkinsonia aculeata](#) L. (parkinsonia) from near Charleville. Daniel McCudden, Biosecurity Queensland.

[Austrocyllindropuntia subulata](#) (Eve's pin cactus) – WONS



Photos: Di Webster, City of Gold Coast Council

If you think you have seen Eve's pin cactus growing in your region, please contact the Queensland Herbarium on **(07) 3896 9323**, email a photo to: Queensland.Herbarium@qld.gov.au or contact Biosecurity Queensland on **13 25 23**.

Your regional coordinators

Regional coordinators are your local weed experts and are able to answer your questions about training, specimen preparation and weed identification in your area. Give them a call!

Brisbane and WSNQ coordinator

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Weed Spotters' Network Queensland is a joint project between the Queensland Herbarium, the Department of Agriculture and Fisheries and local governments with funding support from the Land Protection Fund