

Weed Spotters' Network Queensland

Bulletin

March 2015



Pathways of weed spread: vehicles and boats

Queensland is a big state and many of us regularly drive long distances. This is a common pathway for new weed invasions as weeds easily attach to vehicles and are then transported between regions. If you are heading off the beaten track for business or pleasure, there are a few simple ways we can all help prevent weed spread:

- Stick to designated roads and tracks and avoid weed infested areas.
- Before travelling off-road, check with local governments or landholders for any travel restrictions due to weed infestations. Contact landowners before entering their properties and check what their requirements are for preventing weed spread.
- Weed seed can accumulate in vehicle foot wells, carpets, mats, seatbelts, spare tyres, grills, radiators, air filters and windscreens wipers. Dirt and mud anywhere on the vehicle can transport weed seed and fragments. Clean vehicles by blowing, vacuuming or washing off dirt, mud and seeds. [Vehicle and machinery clean down procedures](#) are available from the DAF website.
- Watch the video '[Weed out the seeds](#): How to clean down your vehicle and machinery to help prevent the spread of weed seeds'.
- Where available, use the many cleandown facilities located across Queensland to help prevent the spread of weed seeds between regions.
- Check boats, propellers and trailers for any plant material before entering or leaving waterways.
- Wash your car or boat on the lawn to prevent seeds and plant fragments from entering waterways.

Regional coordinator profile: John Conroy

John Conroy began his career as a boilermaker in western New South Wales before joining the NSW department of Agriculture as a field officer in 1986. In 1990 he moved to Goondiwindi to join the Lands Department as an assistant regional inspector. In 2015, John celebrates his 25th year in this role. Now a biosecurity officer with Biosecurity Queensland, John works on the control of water hyacinth, water lettuce, parthenium and invasive cacti. Biocontrol of coral cactus is of particular interest for John. If you need advice on weeds on the Granite Belt, the Border Rivers and Goondiwindi region, contact John at: John.Conroy@daf.qld.gov.au

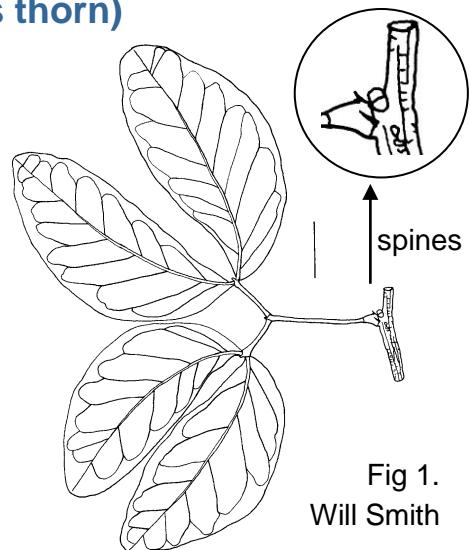


Class 1 declared plants: *Pithecellobium dulce* (Madras thorn)

Native to the American tropics, Madras thorn (or Manila tamarind) is an attractive tropical tree occasionally grown as a garden ornamental in northern Queensland, including variegated and bonsai forms. Madras thorn is fast growing and can reach a height of 20 m. Each bipinnately compound leaf has four oblong leaflets that are asymmetric at the base (fig. 1). Each leaf is generally subtended by a pair of short, sharp spines (fig. 1 inset). Clusters of 20–30 densely hairy white flowers (1 cm diameter) grow at the ends of branches. Pods are curly and pink when mature and contain 10–12 shiny black seeds (fig. 2). The seeds are covered in a fleshy white aril which is edible. These seeds are able to germinate within one or two days but the plant can also reproduce readily from cuttings. Cut stumps and damaged roots also send up an abundance of thorny suckers. Madras thorn can form impenetrable thickets which invade pasture, restrict stock movement, out-compete native vegetation and impact on biodiversity. It is tolerant of drought, dry climates, poor soils, brackish, saline and coastal conditions. Madras thorn has the potential to become a serious problem in tropical and subtropical areas. Read more about this species in the [March 2014 bulletin](#).



Fig 2. Photo: Forest & Kim Starr

Fig 1.
Will Smith

Class 2 declared plants: *Andropogon gayanus* (gamba grass)

Gamba grass is perennial, fire tolerant and can reach the impressive height of 4 m with a tussock diameter of 70 cm. The stems (culms) are rigid and are often covered in soft hairs. Leaves are also often softly hairy, 30–60 cm long and 3 cm wide with a distinctive white midrib. The root system is shallow but extensive, spreading up to 1 m beyond the tussock. Seed heads are made up of fluffy V-shaped spikelets (fig. 3). Each plant can produce up to 244,000 seeds each year and these are easily spread by wind, water or vehicles and machinery. Disturbed areas are particularly susceptible to gamba grass invasion.

Gamba grass is able to out-compete native grasses and is a threat to biodiversity. It sequesters large volumes of water and nutrients, potentially altering catchment hydrology and nutrient cycles. Gamba grass infested ecosystems can have up to eight times the fuel load of non-infested woodlands or pastures. This can result in frequent and intense wildfires which can adversely affect threatened species, cause habitat loss, dramatically reduce tree cover and degrade ecosystems.

For these reasons, gamba is one of five grasses listed as a 'key threatening process' under the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*. Read more about gamba grass in the [March 2014 bulletin](#).



Fig 3. Photo: J. Clarkson

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

Class 2 declared plant: *Elephantopus mollis* (tobacco weed)

Tobacco weed is a member of the daisy family (Asteraceae) and is native to the tropical regions of the Americas. It is invasive in most tropical regions of the world, especially on fertile soils and where annual rainfall exceeds 1400 mm. In Queensland, it is known from Cooktown to south of Sarina. However, tobacco weed could establish in south-east Queensland, particularly in moist run-on areas.

Tobacco weed can grow quickly to reach 1.5 m (fig. 1). The leaves grow mostly at the base of the plant and are oval to oblong in shape (10–20 cm long and 2–5 cm wide). The upper surface of the leaves is hairy and is rough to touch. The underside of the leaves is resinous and densely hairy,

especially along the veins. Branching is sparse and the stem is woody at the base when mature. The stem is covered in fine white hairs which may cause skin irritation when brushed against.

Flowering can occur year round but is most common in autumn. The flowers are held at the tip of the stems and side shoots in a cup made up of three leaf-like bracts (fig. 2). Individual flowers are small (4 mm), white (or rarely pink) and tubular with 5 lobes.



Fig. 2. Photo: DAF



Fig. 1. Photo: DAF

Tobacco weed produces large quantities of seeds that are grey to black (3 mm long) and have five white bristle-like hairs to aid wind dispersal. Seeds are also dispersed via animals, machinery and water. Germination can occur year round and the resulting dense seedling layer (fig. 3) is able to smother other pasture species. Tobacco weed is not nutritious for livestock and is a threat to the grazing and dairy industries of north Queensland.



Fig. 3. Photo: DAF

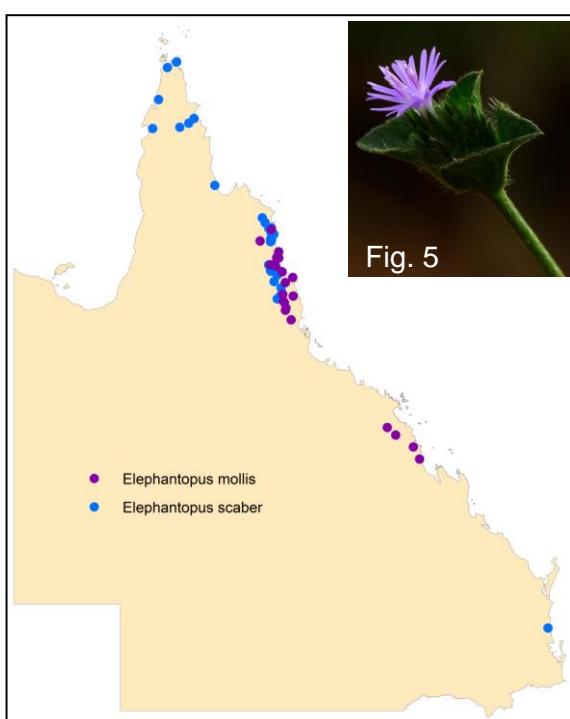


Fig. 5

A very similar species, *Elephantopus scaber*, has an overlapping range with tobacco weed (fig. 4).

This species differs by having almost leafless stems and blue flowers rather than white (fig. 5, photo courtesy of www.flowersofindia.net). *Elephantopus scaber* is not declared and is considered to be less of a threat to production than tobacco weed.

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

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

Species	Common name	Watch for in this region	Field attributes to look for
# <u><i>Alternanthera philoxeroides</i></u> (February 2014 bulletin)	alligator weed	South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Mackay Whitsunday, Torres Strait, Dry tropics	hollow stems, white flowers, wetlands and creeklines
# <u><i>Andropogon gayanus</i></u> (this issue)	gamba grass	Southern Gulf, Northern Gulf	large, tufted grass
# <u><i>Cylindropuntia prolifera</i></u> (August 2014 bulletin)	coastal cholla	Fitzroy Basin, Desert Channels, Southern Gulf, Dry tropics, South West Queensland	spines to 2 cm long
# <u><i>Cylindropuntia tunicata</i></u> / # <u><i>C. rosea</i></u> (July 2013 bulletin)	chain-link cactus/ Hudsons pear	Fitzroy Basin, Desert Channels, Southern Gulf, Dry Tropics, South West Queensland	long spreading spines
# <u><i>Eichhornia azurea</i></u> / <u><i>E. crassipes</i></u> (October 2014 bulletin)	water hyacinth	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, floating, purple flowers
<u><i>Elephantopus mollis</i></u> (this issue)	tobacco weed	South East Queensland, Burnett/Mary	daisy to 1 m tall, flowers white or pink
# <u><i>Equisetum spp.</i></u> (July 2013 bulletin)	horsetails	South East Queensland	primitive plant, no flowers, leaves reduced
<u><i>Heterotheca grandiflora</i></u> (September 2014 bulletin)	telegraph weed	South East Queensland	daisy to 2 m, flowers yellow
<u><i>Hymenachne amplexicaulis</i></u> (June 2013 bulletin)	hymenachne	Desert Channels, Queensland Murray Darling Region, Condamine , South West Queensland	robust grass to 2.5 m, water bodies & drains
# <u><i>Limnocharis flava</i></u> (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
# <u><i>Mikania micrantha</i></u> (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
# <u><i>Nassella tenuissima</i></u> (February 2014 bulletin)	Mexican feather grass	Queensland Murray Darling Region, Condamine, Fitzroy Basin	tufted grass, spindly leaves
# <u><i>Neptunia oleracea/N.plena</i></u> (June 2013 bulletin)	water mimosa	South East Queensland, Burnett/Mary, Cape York, Fitzroy Basin, Mackay Whitsunday, Torres Strait, Wet Tropics, Dry Tropics	floating & taking over a water body, ferny leaf

Species (cont.)	Common name	Watch for in this region	Field attributes to look for
<u>Pistia stratiotes</u> (November 2014 bulletin)	water lettuce	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, resembles a small open lettuce
# <u>Pithecellobium dulce</u> (this issue)	Madras thorn	Cape York, Fitzroy Basin, Southern Gulf, Northern Gulf, Dry tropics	pair of spines at leaf base, small white flowers, segmented curved pods
<u>Pueraria montana var. lobata</u> (February 2015 bulletin)	kudzu	South East Queensland, Burnett/Mary	vine with fragrant purple-pink flowers
<u>Salvinia molesta</u> (November 2013 bulletin)	salvinia	Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	water bodies, leaves with water repellent hairs
<u>Senecio madagascariensis</u> (August 2014 bulletin)	fireweed	Wet Tropics	daisy to 60 cm, flowers yellow
<u>Solanum viarum</u> (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
# <u>Ulex europaeus</u> (October 2013 bulletin)	gorse	Queensland Murray Darling Region, Condamine	yellow flowers, thorny leaves
# <u>Vachellia karroo</u> (May 2013 bulletin)	karroo thorn	South East Queensland, Fitzroy Basin, Desert Channels, Queensland Murray Darling Region, Condamine, South West Queensland	long, white, paired thorns

Class 1 declared plant

Upcoming Weed Spotter training

Mackay, 10 am–12 pm Wednesday 6 May 2015.

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

Notifications – February 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; **NEAL**=National Environmental Alert List)

1. **Class 1 weed/NEAL** [*Gymnocoronis spilanthoides*](#) (D.Don ex Hook. & Arn.) DC. (Senegal tea plant) from Wynnum. Heike Eberhard, Brisbane City Council.

Class 1 declared plant: [*Gymnocoronis spilanthoides*](#) (Senegal tea plant)

Senegal tea is a highly invasive Class 1 declared plant first recorded in Queensland in Redland Shire in 1995. Since then it has since spread to several sites in SEQ, most recently near Landsborough. It is a perennial daisy native to western Brazil, Bolivia, Chile, Uruguay, Mexico and Argentina and has been spread by the inappropriate dumping and growing of aquarium plants into south-east Queensland waterways.

Senegal tea can grow as a shrub to 1 m in shallow water along riverbanks, or as a floating aquatic in stagnant or slow moving fresh water. It can grow quickly to form dense floating mats which shade out and smother other aquatic flora and fauna. These mats can cause blockages in waterways leading to flooding and the restriction of recreational activities. Large quantities of rotting vegetation can also have a negative impact on water quality.



DAF



Senegal tea can spread by seed, particularly into disturbed areas, but is more often spread when stem fragments from disturbed populations float downstream and take root. Seeds are 5 mm in diameter, ribbed with no pappus and are dispersed by water. Stems grow to 20 mm in diameter and to 1.5 m in length. The larger stems are hollow, allowing them to float. Senegal tea has opposite leaves up to 20 cm long which are spear-shaped and dark green with a serrated margin. Flowers appear from late spring to late autumn and are white balls 15–20 mm in diameter held at the end of the stems.

If you think you have seen Senegal tea growing in your region, please contact the Queensland Herbarium on **(07) 3896 9323**, email a photo to: Queensland.Herbarium@dsitia.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