



1. Habit growing on the edge of the Tarradarrapin Wetlands in Brisbane. 2. Pure white newly opened flower. 3. Older flower which is pink in colour. 4. Broad leaves with several shallow pointed lobes.



## Cotton Rose (*Hibiscus mutabilis*)

Introduced

Not Declared

Cotton Rose is a member of the Malvaceae plant family that is native to southern China. It is cultivated as a garden ornamental in Australia and is becoming increasingly common as a weed of riparian vegetation, wetlands and disturbed sites.

### Distribution

A naturalised population of Cotton Rose was first recorded from mainland Australia in the Coffs Harbour area of north-eastern NSW in 1991. This was closely followed by a record from Wooroonooran National Park in northern Queensland in 1992. There were no further herbarium records until 2005, but since then there have been numerous herbarium records and other sightings from south-eastern Queensland, northern Queensland, north-eastern NSW and south-western WA. The majority of these are from south-eastern Queensland, including at Woodford, on North Stradbroke Island, in Ipswich, and from many parts of suburban Brisbane.

Cotton Rose has also become naturalised in Japan, south-eastern USA, New Zealand and on several Pacific islands (i.e. Lord Howe Island, Hawaii and Micronesia).

### Description

A large shrub or small multi-stemmed tree growing 2-5 m tall that loses some or all of its leaves during winter (i.e. it is semi-deciduous). Its younger stems, leaf stalks, leaf undersides and flowers buds are covered in a mixture of star-shaped hairs and short woolly hairs. The alternately arranged leaves are borne on stalks 5-20 cm long. These leaves are 10-15 cm across and have 5-7 shallow lobes with pointed tips. Their margins are also finely toothed and their undersides are distinctly paler in colour.

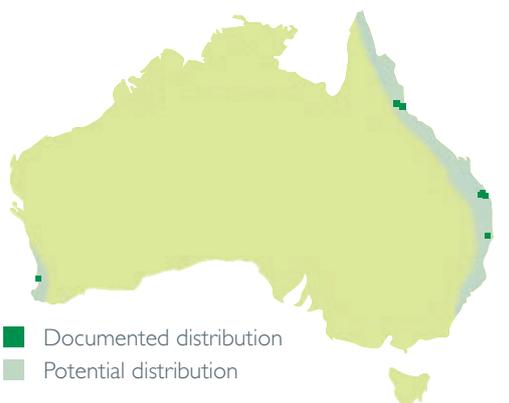
The large and showy flowers (8-13 cm across) are arranged singly in the forks of the leaves but may appear to be clustered towards the tips of the branches. They are borne on stalks 5-15 cm long that have a joint just below the flower. The flowers are pure white when they first open, but gradually change colour over time until they are deep pink to bright crimson. Flowers usually have five almost rounded petals (4-6 cm across), but double-flowered cultivars are commonly cultivated (i.e. *Hibiscus mutabilis* 'Flora Plena') which have numerous petals with a crinkled appearance. There are five partially-fused green sepals (2-4 cm long) at the base of the flower which have pointed tips. Below these sepals is a ring of 8-12 slender sepal-like structures (i.e. an epicalyx), each structure being 10-20 mm long and about 2 mm wide. The fruit is a rounded capsule about 25 mm across with a slightly flattened top. It is covered in long hairs and turns from green to yellowish and the brown in colour as it matures. When fully mature it splits open into five segments and releases numerous kidney-shaped seeds that are also hairy.

### Quick Facts

- > A semi-deciduous shrub usually growing up to 4m tall
- > Younger stems, leaves and flower buds are variously hairy
- > Leaves are relatively large with 5-7 shallow lobes
- > Showy flowers turn from white to deep pink or crimson over time

### Habitat

In its native range, Cotton Rose forms thickets along streams. It is commonly found growing in similar habitats where it has become naturalised (i.e. along waterways and in wetlands). It has also been recorded near old gardens, along roadsides, and in other disturbed sites.





1. Double-flowered cultivar known as *Hibiscus mutabilis* 'Flora Plena'. 2. Immature and mature fruit. 3. Close-up of open fruit capsule with hairy seeds.

## Reproduction and Dispersal

This species reproduces mainly by seed, but little else is known about its reproduction and dispersal. It may also be able to become established from vegetative parts if conditions are suitable. As it commonly grows along waterways, the seeds are probably dispersed by water. They may also be spread by animals, in dumped garden waste or in contaminated soil.

## Why is it an Emerging Threat?

Cotton Rose has spread from cultivation as a garden ornamental and become established in natural vegetation. This emerging environmental weed is mainly a problem along waterways and in riparian vegetation, and it is becoming increasingly common in these habitats (particularly in suburban Brisbane). While it seems to be spreading quite slowly, and most populations generally only consist of scattered plants at present, it may form dense thickets over time which could eventually have a negative impact on native species.

## Control Methods

Individual plants can be manually removed with the aid of suitable tools, but attention must be taken to remove the entire crown, as plants may regrow from the base.

There is no information readily available on the control of Cotton Rose with herbicides. However, some products which are registered for the control of woody environmental weeds in Queensland via APVMA off-label Permit 11463 may be suitable (see <http://permits.apvma.gov.au/PER11463.PDF>). For example, some formulations of triclopyr + picloram, fluroxypyr or 2,4-D may be applied as a foliar spray directly to the target plants. Alternatively, other formulations of these same chemicals and formulations of Glyphosate can be applied as a cut stump or basal bark application.

However, this plant is often found growing along waterways, and in such situations only herbicides with an aquatic registration should be used to control it (e.g. Round-up Biactive or Weedmaster Duo). Please read the permit carefully for the exact products and rates to use and, unless otherwise stated in the permit, the use of these products must be in accordance with the instructions on their labels. Within other state boundaries, it is recommended that all managers consult any relevant permits or government legislation applicable to their region.

*The control methods referred to in Weed Watch™ should be used in accordance with the restrictions (federal and state legislation and local government laws) directly or indirectly related to each control method. These restrictions may prevent the utilisation of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, Technigro does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.*

*This information has been developed with the assistance of The IVM Group and Dr Sheldon Navie. Photographs are also courtesy of Dr Sheldon Navie © Technigro Australia Pty Ltd 2014*

## Look a-likes

Cotton Rose is relatively similar to some native Hibiscus species including Pink Hibiscus (*Hibiscus splendens*). However, native *Hibiscus* species generally have un-lobed or three-lobed leaves and many also have flowers that are yellow in colour.



**Top.** The similar native species known as Pink Hibiscus.

**Bottom.** Juveniles sometimes have five-lobed leaves, but they are more deeply lobed.