



1. Habit growing in a drain in suburban Brisbane. 2. Flower with four broad yellow petals. 3. Four-angled immature fruit topped with persistent sepals 4. Narrow leaves and slightly winged stems.



AQUATIC

Long-leaved Willow Primrose (*Ludwigia longifolia*)

Introduced

Not Declared

Long-leaved Willow Primrose is an upright aquatic plant native to South America (i.e. southern Brazil, Paraguay, Uruguay and northern Argentina) that has been grown as an ornamental in aquatic situations. It has spread from cultivation and become established in wetter sites at several locations in eastern Australia.

Distribution

This species was first recorded as naturalised in Australia in 1991. The first report was from the Sydney area, where it has since become established at several wetland sites. However, it has become a more significant and widespread problem in the Port Stephens and Gosford areas on the New South Wales Central Coast. In the Salamander Bay area, at Port Stephens, it has been extremely invasive and has formed extensive dense colonies.

In the last ten years this species has also become increasingly common in the northern suburbs of Brisbane in south-eastern Queensland. For example, infestations have been found along drains and creeks in Toowong, Bardon, Ashgrove and Kelvin Grove. It has also been recorded growing in urban wetlands on the Gold Coast. Most recently, in October 2013, a population was reported from Malanda in northern Queensland.

Description

Long-leaved Willow Primrose is a small upright shrub usually growing 1-2 m tall, but it can occasionally reach up to 3 m in height. The stems are hairless, square in cross-section, and usually also slightly winged. The long and narrow leaves (5-35 cm long and 5-25 mm wide) are stalkless with pointed tips and entire margins. They are alternately arranged along the stems, mostly hairless, and have a somewhat glossy appearance. The central vein of the leaf is prominent and often reddish in colour, as are the younger stems.

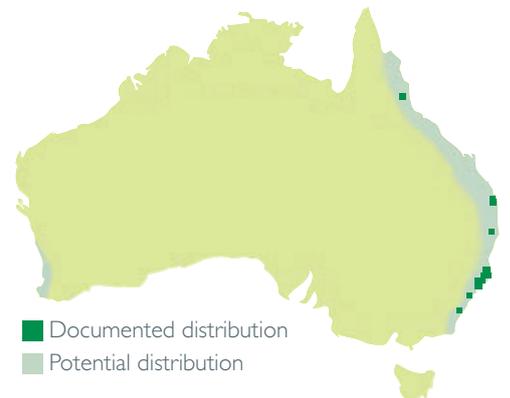
The bright yellow flowers are borne singly in the upper leaf forks on stalks 5-40 mm long. Each flower has four greenish or reddish sepals (1-2 cm long) with pointed tips. These sepals remain on the fruit as it develops. Each flower also has four, or rarely five, bright yellow petals (20-25 mm long and about 20 mm wide) with rounded tips. The fruit capsule is elongated in shape (1-4 cm long and 5-10 mm wide) and sharply four-angled. It contains large numbers of tiny dust-like seeds (less than 1 mm long) in four internal compartments. The fruit turn from green (or reddish) to light brown in colour as they mature, and eventually split open or disintegrate to release their seeds.

Quick Facts

- > Upright shrubby plant (1-2 m tall) usually growing in shallow water
- > Stems are square in cross-section and slightly winged
- > Long and narrow leaves (5-35 cm long and 5-25 mm wide) which are mostly hairless
- > Bright yellow flowers with four, or rarely five, bright yellow petals
- > Sharply four-angled fruit (1-4 cm long and 5-10 mm wide) with numerous tiny seeds

Habitat

Long-leaved Willow Primrose is a potential weed of waterways, swamps, wetlands, lake margins, ponds and other damp sites. It may also grow along drainage channels and in farm dams.





1. Mature fruit splitting open to release its seeds 2. Young plant growing in shallow water.

Reproduction and Dispersal

This species generally reproduces by seed, though stem segments may take root in suitable conditions. The small seeds can be dispersed by water, wind, animals or human activities (e.g. in contaminated soil or dumped garden waste). Seed production occurs throughout the year, but is most abundant during summer and autumn.

Why is it an Emerging Threat?

Long-leaved Willow Primrose is already regarded as a potentially serious environmental weed in New South Wales. It is declared as a locally controlled weed (i.e. Class 4 Noxious Weed) in some parts of NSW, and it may not be sold, propagated or knowingly distributed throughout that state. This species can form very dense colonies and if allowed to spread unmanaged it can dominate wetlands and riparian vegetation, replacing the native species that grow in such environments. The dense growth of this species also obstructs water flow and increases sedimentation in waterways.

Long-leaved Willow Primrose is still in the early stages of its spread throughout the coastal districts of eastern Australia. It is thought to have the potential to become a problem species throughout the wetter tropical, sub-tropical and warmer temperate regions of Australia.

Control Methods

Individual plants or small infestations can be removed manually, taking care to ensure that the crown is removed. Once collected, all plant material should be removed from the site and disposed of in a sanitary manner.

When larger infestations are present, or where access is more difficult, the use of herbicides may be necessary. While there are no herbicides currently registered for the control of this species in Queensland, the control of environmental weeds such as Long-leaved Willow Primrose is currently allowed in Queensland via off-label permit 11463 (<http://permits.apvma.gov.au/PERI11463.PDF>). Under this permit, the use of aquatically registered formulations of Glyphosate (e.g. Round-up Biactive and Weedmaster Duo) can be used for the spot spraying of weeds in aquatic and wetland areas.

There is also a specific off-label permit (<http://permits.apvma.gov.au/PERI11566.PDF>) for the control of this species in semi-aquatic and aquatic situations in NSW. For control within other state boundaries, see the relevant permits or government legislation.

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

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Look a-likes

Long-leaved Willow Primrose is very similar to the introduced Peruvian Water Primrose (*Ludwigia peruviana*) and the common Native Willow Primrose (*Ludwigia octovalvis*), but these two species have rounded stems and hairy leaves. The fruit of Native Willow Primrose are also rounded in cross-section or slightly ribbed.



Top. Habit of Native Willow Primrose.

Bottom. Hairy stems, leaves and slightly ribbed fruit of Native Willow Primrose.