



1. Habit growing on muddy ground. 2. Hairless stems and immature fruit. 3. Paired leaves and small yellow flowers. 4. Habit growing in shallow water.



AQUATIC

Red Ludwigia (*Ludwigia repens*)

Introduced

Not Declared

Red Ludwigia is a creeping aquatic plant native to tropical America (i.e. southern USA, the Caribbean and Central America). It is also known as Creeping Ludwigia and is widely grown as an aquarium plant in Australia. It has spread from cultivation and become established in wetter sites in several urban locations.

Distribution

Red Ludwigia has recently been recorded becoming established at several locations including the Brisbane, Sydney and Perth regions in Australia. The first record in Queensland was from a small dam in the Brisbane suburb of Rochedale in November 1997. This was followed by a population at Colleges Crossing, near Ipswich, in December 2002. A larger population was then reported from along the South Pine River in the Samford Valley in late 2007 and early 2008. Then, in November 2008, Red Ludwigia was recorded growing along Moggill Creek in the western suburbs of Brisbane.

In NSW, a significant infestation of Red Ludwigia was reported from Browns Waterhole, along the Lane Cove River; in the northern suburbs of Sydney in February 2005. In March 2008 it was also recorded growing in a drain at Lightning Swamp in the northern suburbs of Perth.

Description

An aquatic plant with branching stems that spread across muddy ground or float on the water surface. These hairless stems produce roots at their joints and often form a mat of vegetation. The leaves are arranged in pairs along the stems and are relatively small (1-4.5 cm long and 5-25 mm wide). They are usually somewhat oval in shape with entire margins and are borne on stalks 5-25 mm long. The leaves are mostly hairless with glossy upper surfaces and are often reddish tinged.

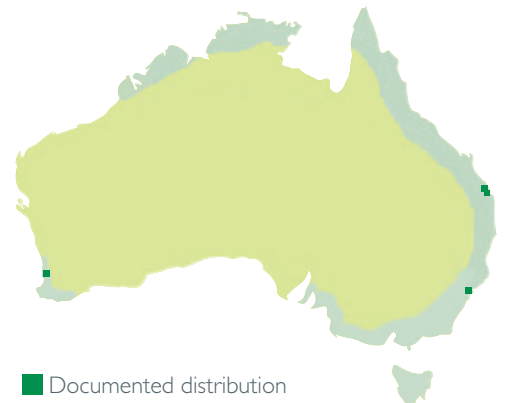
The small flowers are arranged in pairs along the stems, with a single flower produced at the base of each leaf stalk. These flowers have four triangular sepals (up to 5 mm long) and four relatively small yellow petals (1-3 mm long). The fruit is oblong in shape (4-10 mm long), but often somewhat ridged or angled. It contains numerous tiny yellowish-brown seeds.

Quick Facts

- > A creeping aquatic plant that forms very dense mats in mud or shallow water
- > Stems that produce roots where they come into contact with soil
- > Paired leaves that are often reddish tinged
- > Small yellow flowers in the leaf forks

Habitat

Red Ludwigia 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.



■ Documented distribution
■ Potential distribution



1. Part of an infestation along Moggill Creek in Brisbane. 2. Forming a very dense mat of vegetation.

Reproduction and Dispersal

This species reproduces by seed as well as vegetatively via stem fragments. It is probably initially introduced into waterways by the dumping of aquarium waste. Dislodged pieces of stem can easily take root after being dispersed by floodwaters, boats or machinery. The tiny seeds may also be dispersed by water or in mud attached to machinery, footwear, clothing and animals (e.g. ducks).

Why is it an Emerging Threat?

Red Ludwigia has the capacity to form dense infestations in wetter habitats, and may eventually clog wetlands and slow moving waterways. It replaces native plants in such situations, reducing biodiversity and intercepting most of the incoming light. This can also cause significant ecological impacts such as increased sedimentation, accumulation of organic material and deoxygenation of the water column. It can also reduce the rate of flow in streams affect the usefulness of waterbodies for recreational and navigational purposes. Red Ludwigia was recently assessed as a high risk species as part of a weed risk assessment of about 400 aquarium plants.

Control Methods

Individual plants or small infestations can be removed manually, taking care to ensure that no stem and root material remains in the soil. Once collected, all plant material should be removed from the site and disposed of in a sanitary manner. Prevent further spread of the weed to other areas by avoiding fragmentation of stem material.

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 Australia, the control of environmental weeds such as Red Ludwigia is currently allowed in Queensland via off-label permit 11463 (<http://permits.apvma.gov.au/PER11463.PDF>). Under this permit, the use of aquatically registered formulations of Glyphosate (e.g. Round-up Biactive and Weedmaster Duo) is permitted for the spot spraying of weeds in aquatic and wetland areas. For control within other state boundaries, see the relevant permits or government legislation.

Look a-likes

Red Ludwigia is somewhat similar to the native Water Primrose (*Ludwigia peploides* subsp. *monteviden-sis*) when not in flower. However, Water Primrose has alternately arranged leaves and its yellow flowers are much larger (i.e. with petals 11-13 mm long). The introduced Marsh Ludwigia (*Ludwigia palustris*) is also very similar, but its flowers don't have any petals and it is only known from south-eastern Australia.



Top. Native Water Primrose when not in flower.

Bottom. Marsh Ludwigia with inconspicuous flowers lacking petals.

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 Dr Sheldon Navie. Photographs are also courtesy of Dr Sheldon Navie © Technigro Australia Pty Ltd 2012

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