

Limnocharis

Limnocharis flava



Limnocharis is considered to be a major weed in many countries. This perennial aquatic plant colonises shallow wetlands and margins of deeper waterways. It can quickly grow to dominate native aquatic plants and affects the ecology of stream banks by displacing native flora and fauna.

Limnocharis can change the hydrology of water bodies by reducing the width of channels, thereby restricting water flow and creating silt traps. It can also restrict human and livestock access to water and provide favourable breeding areas for disease vectors like mosquitoes.

In Asia, limnocharis hinders agricultural production by infesting irrigation channels, drainage ditches and rice paddies. These rice paddies are rendered useless and are often abandoned as a result. Limnocharis infestations pose serious threats to agriculture and biodiversity in northern Australia.



Legal requirements

Limnocharis is a category 2, 3, 4 and 5 restricted invasive plant under the *Biosecurity Act 2014*. The Act requires that all sightings of limnocharis plants must be reported to Biosecurity Queensland within 24 hours of being found.

By law, everyone has a general biosecurity obligation (GBO) to take all reasonable and practical steps to minimise the risk of spread of limnocharis until they receive advice from an authorised officer. It must not be kept, moved, given away, sold, or released into the environment without a permit.

Description

Limnocharis is an anchored, aquatic, erect clump-forming herb that is generally found growing in saturated, fertile and muddy conditions.

Limnocharis can reach 1 m in height. The pale green, velvety leaves are up to 28 cm long and 20 cm wide with 11–15 parallel veins. The leaf blade shape varies with age; it is fairly narrow when young then becomes more oval as the plant ages. The triangular stem is a key identification feature (most aquatic plant stems are round) and can be up to 85 cm long.

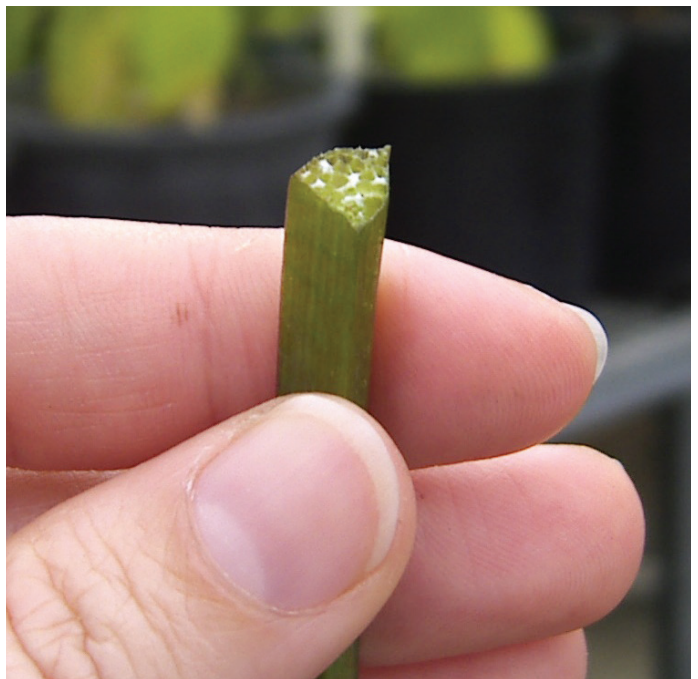
The yellow, cup-shaped flowers are borne on triangular stalks. Each stalk produces 2–15 flowers. The spherical capsules produced after flowering split into 12–18 crescent-shaped pieces called follicles, which may contain up to 115 small brown seeds.

Life cycle

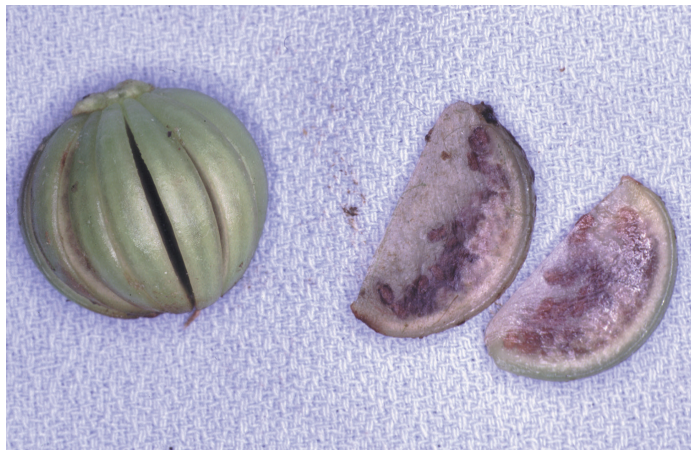
Limnocharis can reproduce vegetatively and by seed. Mature fruit can be produced in as little as 46 days. Seeds contained in the mature fruit capsules or the individual follicles are buoyant and can be distributed by running water.



Limnocharis flower



Cross-section of the triangular stem



Fruit and fruit segments containing seed
(photograph courtesy of P Zborowski)

To reproduce vegetatively, the ageing fruit capsule bends towards the water, allowing the seeds to escape. The empty capsule can then develop into a vegetative plantlet that either establishes beside the parent plant or floats away to establish elsewhere.

Methods of spread

A change in hydrology (e.g. flooding) is the most effective method of spread. While many fruiting capsules disintegrate fairly quickly in the water some remain intact for a number of days, allowing the seed to be dispersed from the parent plant.

It is possible for seed to be spread via mud stuck to vehicles, machinery, footwear, water birds and animals.

There have also been records of trade between gardeners for use in water features.

Habitat and distribution

Limnocharis is found growing in saturated, fertile and muddy conditions. It grows as a perennial plant in areas with sufficient moisture, but can act as an annual plant where moisture is seasonal. As a tropical species, limnocharis is frost-sensitive.

The native range of limnocharis extends from Mexico to Bolivia, Paraguay and northern Argentina. From its native range, limnocharis has moved into parts of south-east Asia, Africa and the South Pacific.

Limnocharis was first identified in Australia in 2001. At present, infestations are found only in northern Queensland. However, there is potential for it to establish in northern regions of Western Australia and the Northern Territory and the northern and coastal regions of Queensland and New South Wales.

In North Queensland, populations of limnocharis have been detected between Mossman in the north, Atherton in the west and Townsville in the south.

Since 2001, limnocharis has been the target of a national cost-shared eradication program, managed by Biosecurity Queensland with financial support from other states and the federal government.

Control

There are no herbicides registered to specifically control limnocharis. All suspected infestations should be reported to Biosecurity Queensland who will develop a site-specific eradication program with the landholder.

Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit biosecurity.qld.gov.au.





A limnorchis-infested waterway flower



Small, yellow cup-shaped flower

This fact sheet is developed with funding support from the Land Protection Fund.

Fact sheets are available from Department of Agriculture and Fisheries (DAF) service centres and our Customer Service Centre (telephone 13 25 23). Check our website at biosecurity.qld.gov.au to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet 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 use 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, DAF does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.