



# Aquatic Weeds in the Wet Tropics



## What are aquatic weeds?

Aquatic weeds are invasive plants that thrive in waterways and wetlands, disrupting ecosystems and causing significant environmental, economic, and social impacts. This fact sheet covers twelve of the most significant aquatic weeds in the Wet Tropics.

Aquatic weeds like Salvinia, water lettuce, water hyacinth and Amazon frogbit are non-native plants introduced through the ornamental or aquarium trade, agriculture, or accidental spread. They invade waterways, wetlands, and floodplains, forming dense mats or thickets and altering ecosystems.

Characteristics



**SALVINIA:** A floating fern with oval leaves covered in waxy hairs. Forms dense mats on still or slow-moving water.



**WATER LETTUCE:** Resembles a floating head of lettuce with velvety, ribbed leaves and feathery roots.



**WATER HYACINTH:** A free-floating plant with glossy leaves, bulbous stems, and purple flowers.

Image: "Common Water Hyacinth" by Dinesh Valke is licensed under CC BY-SA 2.0.



**CABOMBA:** A submerged plant with fan-shaped leaves and small white flowers.



**AMAZON FROGBIT:** Floating rosettes with round leaves and sponge-like undersides.



**BOG MOSS:** A submerged moss-like plant forming dense mats in shallow water.



**OLIVE HYMENACHNE:** A tall grass with broad, claspng leaves, often found in wetlands.



**LIMNOCHARIS:** An anchored aquatic plant with triangular stems and yellow flowers.



**HYGROPHILA:** A tall, upright plant with veined leaves and white/pink flowers in the leaf axils. There are two species that have become weeds in the Wet Tropics.



**POND APPLE:** A tree with glossy leaves and large, rounded fruit, invading wetlands.



**WATER MIMOSA:** A floating herb with spongy stems and sensitive leaves.



**ALEMAN GRASS:** A semi-aquatic grass with long, flat leaves and dense seed heads.



## Why are they a problem?

### Aquatic weeds:

- Smother native vegetation, reducing biodiversity.
- Alter water quality by depleting oxygen and blocking sunlight.
- Create breeding grounds for pests like mosquitoes.
- Create favourable habitat for other aquatic pests like the pest fish, Tilapia.
- Impede water flow, attract sediment, and alter channels, increasing flood risks.
- Obstruct recreational activities and water infrastructure.
- Threaten agriculture by invading drains, irrigation systems and crops.

## What to do about them

- **Responsible disposal:** Make sure that aquarium contents are not released where they can enter waterways, drains or wetlands. Bag and bin aquarium plants and rehome or euthanise unwanted pet fish or return them to your aquarium store.
- **Prevention:** Avoid planting invasive species in gardens or aquariums. Clean boats and equipment when moving between waterways to prevent spread.
- **Physical removal:** Manually remove small infestations or use mechanical removal for larger areas. Ensure proper disposal to prevent regrowth.
- **Chemical control:** Apply approved herbicides following best practice guidelines. Use aquatic-safe products to minimise environmental impact. There are some on-label herbicides available for aquatic weeds. However, an off-label use permit (Permit No. PER11463 <https://permits.apvma.gov.au/per11463.pdf>) allows use of various herbicides for control of environmental weeds in nonagricultural areas, bushland, forests, wetlands, and coastal and adjacent areas. Follow up control may be required.
- **Biological control:** Introduce natural predators like weevils for Salvinia or specific fungi for water hyacinth.
- **Monitoring and surveillance:** Regularly inspect water bodies for new infestations. Follow-up surveys might be required after flood events to detect any new infestations.

## BIOSECURITY RISKS



## How to spot them on your property

- Look for rapid growth, dense mats or thickets of vegetation in water bodies.
- Identify distinctive features like floating leaves, flowers or submerged stems.
- Check for rapid growth in still or slow-moving water, wetlands, or floodplains.

## Where to find out more

**RESOURCES:** Check out your Local Government's Biosecurity Plan available through your Council's website for the aquatic weeds which are a priority in your area.

Search for the Queensland Government's information on the aquatic weeds in your area in your favourite browser to access Pest Facts for herbicide rates and detailed control information.

### BIOSECURITY OBLIGATIONS AND LEGAL REQUIREMENTS:

All aquatic weeds on this list are either regulated under the Queensland Biosecurity Act or Local Laws. Refer to your local biosecurity plan for more information.

### GENERAL BIOSECURITY OBLIGATION:

The Biosecurity Act requires everyone to take all reasonable and practical measures to minimise the biosecurity risks associated with aquatic weeds under their control.