Water mimosa *Neptunia plena*



A semi aquatic floating perennial herb. Can grow on land in damp soil or in water as thick floating mats.



Stems grow out over the water and form a thick spongy, fibrous covering that aids floatation.



Olive-green, bipinnate leaves 5 - 18mm long and 1.5 - 3.5mm wide, arranged in opposite pairs along the stem. When disturbed or touched the leaflets close up. Plants growing on land have smaller leaves.



Small, almost rounded flower clusters are borne on slender stalks 5 - 20cm.



Thick taproot that becomes woody with age and produces stems up to 1.5m long which may become detached.

Water mimosa is not currently a declared weed in the Northern Territory.

The problem

Water mimosa poses an extreme threat to Top End waterways and wetlands. This aquatic floating perennial herb takes root on the banks of watercourses, forming floating rafts. Water mimosa can restrict water flow in creeks, channels and drains. It can increase water loss and reduce water quality; creating a favourable habitat for mosquitoes. Water mimosa can also reduce fish activity, replace native wetland plants, and impede recreational water sports and boating access.

Habitat and distribution

Water mimosa grows in the coastal regions of southern North America, Central America, northern South America and tropical Asia. Water mimosa was found in a number of farm dams in south-eastern Queensland in 2006, however, all of these known populations have been controlled. An infestation in Nhulunbuy was found in the 'Town Lagoon' in March 2012 and an eradication and monitoring program is currently underway.

Water mimosa tends to prefer canals, ponds and swamps. The rooted land form has smaller leaves and flowers, and has no spongy floating tissue. Plants prefer 30 - 80 cm depth of slow-moving water, full sun and hot and humid conditions. Under favourable conditions, water mimosa grows out from the banks to form floating rafts of dense interwoven stems. These can be dislodged by water movement (especially during floods) and are soon replaced by more water mimosa.



Preventing spread of water mimosa

Water mimosa can grow from seeds and from sections of stem that break free from the parent plant. Some species of water mimosa have been known to germinate after 90 years of storage.

Young leaves, shoot tips and young pods are eaten raw or stir-fried, in Asia. Roots are used for medicinal purposes.

Shade, brackish water and saline soil adversely affect water mimosa growth. In the case of larger infestations, or where access is more difficult, the use of herbicides may be necessary.

Chemical control

Chemical and concentration	Rate	Situation, method and comments			
Glyphosate 360 g/L	13 ml / 1L	Seedling (individuals or infestation)			
Aquatic suitable		Foliar spray – apply when actively			
Various trade names and		growing			
formulations					

Optimum treatment times – Darker colours represent preferred months for foliar treatment												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	

Non-chemical control

The most appropriate method of control for water mimosa is to physically remove the infestation (this should only be done if it is safe to do so). This can be done by removing all plant matter from the infested water body and pulling plants out of the surrounding banks, ensuring removal of the root system. This should be repeated, and the area monitored until regrowth ceases. All removed plant parts should be disposed of in an appropriate manner.

Disclaimer

In the Northern Territory, a registered product must only be used in situations consistent to those appearing on the label, unless authorised under a permit; and a person:

- must not have in their possession or use a chemical product unless the product is registered in Australia (exemptions apply)
- may use a registered product at a concentration, rate or frequency lower than that specified on the label unless this is specifically prohibited on the label. This does not apply to herbicide use occurring under an Australian Pesticides and Veterinary Medicines Authority (APVMA) permit
- may use a registered product to control a pest not specified on the label provided the pest is in a situation that is on the label and use on that pest is not specifically prohibited on the label
- may also use a registered product using a method not specified on the label unless this is specifically prohibited on the label.

Users of agricultural (or veterinary) chemical products must always read the label and any permit, before using the product and strictly comply with the directions on the label and any conditions of any permit. Users are not absolved from compliance with the directions on the label or conditions of the permit by reason of any statement made in or omission from this publication.

Further information

Weed Management Officers from the Weed Management Branch can provide advice on all aspects of weed management including control techniques, biological control, legislative responsibilities, policy advice, monitoring and regional planning.

For further information on weed management planning, integrated control, herbicide application techniques and monitoring please refer to the <u>NT Weed Management Handbook</u>.

