



NSW DEPARTMENT OF  
PRIMARY INDUSTRIES

# Weed Alert

# HAVE YOU SEEN THIS PLANT?

## Hygrophila

(*Hygrophila costata*)



Hygrophila can cover large areas of shallow water.  
(Photo: J. Hosking.)

### INTRODUCTION

Hygrophila (*Hygrophila costata*) is an invasive and noxious aquatic weed in NSW.

Hygrophila grows easily in shallow water, forming mats of dense growth around the margins of freshwater lakes, rivers and watercourses where it can dominate and out-compete more desirable vegetation. Dense infestations are likely to displace native flora and fauna by destroying their natural habitat. Hygrophila can also interfere with recreational activities such as boating and access to the water's edge.

Hygrophila can be distinguished from East Indian Hygrophila (*Hygrophila polyserma*) which has round stems and can grow over 2 metres long.

### WORLD STATUS

Hygrophila is native to the Americas extending from southern Mexico to Argentina and has naturalised in many tropical and subtropical areas around the world.

In Australia, Hygrophila has naturalised and become weedy in south-eastern Queensland, the far north coast, central coast and greater Sydney regions of New South Wales.

### IDENTIFICATION

#### Leaves and Stems

Hygrophila is a mat-forming herb growing up to 1.5 m high. It has hairy leaves up



Hygrophila leaves are opposite and can be 18 cm long.  
(Photo: P. Gorham)

to 18 cm long and 3 cm wide that arise in opposite pairs and taper to the base. They have prominent veins and a distinct midrib. Upper stems are 4-angled, erect and rarely branched; lower stems are prostrate and root at nodes; the stems may have a red to purplish colour.

#### Flowers

Flowers have white petals and are about 10 mm long. They occur in whorls just above the junction between leaves and the stem.

#### Fruit and Seeds

The fruit capsules are about 7 mm long, spindle-shaped and inconspicuous. Seeds are pale brown, flattened, round, about 0.3 mm wide and become sticky when wet.

Visit our website: [www.dpi.nsw.gov.au/weeds](http://www.dpi.nsw.gov.au/weeds)

## GROWTH AND SPREAD

Hygrophila has a highly invasive growth habit and is often the dominant species where it is found. It grows all year round but most rapidly during the warmer months.

Reproduction is by either seed or stem fragments. Spreading stems sprout new roots from the nodes when they come in contact with the soil, which enables a new plant to form.

Spread is mostly by seeds and plant fragments; these may attach to animals, machinery, watercraft and people or be dispersed by wind and water.

## CONTROL

Control of Hygrophila is very difficult. Mechanical or hand removal may be the most desirable method for small, isolated infestations. However, care must be taken to dispose of the material appropriately; avoid fragmenting the plant and leaving behind pieces that could start new infestations. Correct disposal is essential to prevent further spread.

Herbicide application is the most effective means of control. See the NSW DPI publication *Noxious and Environmental Weed Control Handbook* third edition for permitted herbicides at [www.dpi.nsw.gov.au/weeds](http://www.dpi.nsw.gov.au/weeds).

Preventative measures such as planting riparian vegetation to out-compete Hygrophila, reducing any nutrient inflow into the system and preventing animal and machinery access to the site will prevent further spread and disturbance of the site.

For any activities concerning control of Hygrophila, it is recommended that you first contact your local weeds officer to seek advice on identification, disposal and best practice control method.

## ACKNOWLEDGEMENTS

Written by Peter Gorham, Regional Coordinator (Weeds) and Dr. John Hosking, NSW DPI. Comments by Melissa Freeman and Birgitte Verbeek. Prepared by Annie Johnson.



Flowers are white in whorls at leaf junctions and upper stems are 4 angled. (Photo: J. Hosking)

## WATCH OUT FOR AND REPORT ANY FORM OF HYGROPHILA

*Hygrophila costata* is declared noxious throughout NSW as a Class 2 weed under the NSW *Noxious Weeds Act 1993*. The plant must be eradicated from the land and the land must be kept free of the plant. The plant must not be sold, propagated or knowingly distributed. As a notifiable weed all outbreaks of *Hygrophila* must be reported to the local council within three days.

**If you have seen this plant, please report it to your Council Weeds Officer or NSW Department of Primary Industries for positive identification.**

## FOR MORE INFORMATION:

Contact your local council weeds officer or district agronomist, or telephone the NSW Department of Primary Industries Hotline on 1800 680 244



NSW DEPARTMENT OF  
PRIMARY INDUSTRIES