

# <u>ENVIRONMENT TOPICS</u>

## PLANT PEST CONTROL

# AQUATIC PLANT PESTS Yellow water lily: Nuphar lutea



## Why is this a problem?

Yellow water lily is a perennial yellow flowered water lily, with massive rhizomes (roots) containing stored food. It can totally invade slow-running waterways or lakes, choking out native plants and slowing water flow. Yellow water lily can also stop all recreational use of the waterway.

### How is it spread?

Yellow water lily is spread by rhizome encroachment, movement of fragmented pieces and by seed. Two plants were introduced from South America 60 years ago, which by 1988 covered almost half of a 42 hectare lake.

It is essential that any new sites are identified as soon as possible so the plant can be controlled before it becomes too established for control to be effective.

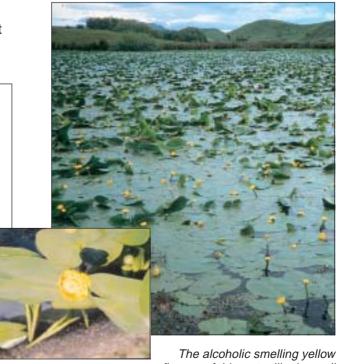
# Yellow water lily is designated as a TOTAL CONTROL plant pest throughout the Hawke's Bay region.

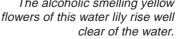
This means the land occupier must destroy all Yellow water lily plants before the production of hard seed.

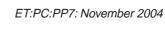
For details please refer to the Regional Plant Pest and Animal Pest Management Strategy, or consult with your Biosecurity Plant Pest Officer at Hawke's Bay Regional Council.

#### What does it look like?

- The distinctive yellow flowers which are 4-6cm wide have a strongly alcoholic aroma, hence the common name of Brandy Bottle. These flowers are solitary and rise well clear of the water.
- The plant has both floating and submerged leaves. Floating leaves are up to 40cm long, and 30cm wide. They are tough and leathery and are generally oblong with a dark green colour.
- The massive rhizomes grow on the bottom to a depth of 3m and are up to 1.5cm in diameter.









#### Where is it found?

At present Yellow water lily is found on one site in New Zealand, which is in Central Hawke's Bay— a 42 hectare lake in the Patangata area.

Yellow water lily is very difficult to eradicate. It is important it is not spread further.

# What's the best way to control this plant pest?

If you suspect that you have Yellow water lily on your property contact your Biosecurity Plant Pest Officer who will help you to identify the plant and assist with control advice.

#### Chemical control

The most successful method of control is glyphosate at 3% with a penetrant. For best coverage aerial spray to avoid disturbing the water surface as the plant leaves lie on or just above the water surface. However, it can be sprayed from a boat or from the water edge with care. Spray mid to late December during flowering.

Apply all herbicides according to their label. Consult your Hawke's Bay Regional Council Biosecurity Plant Pest Officer or agrichemical supplier for the current herbicide recommendations.

### Physical control

If a single plant is found, the best approach is to dig it out. For larger infestations chemical control is the only method of eradication.

Yellow water lily is difficult to eradicate. It is important it is not spread further. Ensure all watercraft are thoroughly cleaned of plant material before leaving the lake area.

#### Biological control

At present there are no biological control agents.

#### For further information

For further information on plant pests ask for other titles in this series or contact Biosecurity Plant Pest Officers at the Hawke's Bay Regional Council for advice.

 Wairoa
 06 838 8527

 Napier
 06 835 9200

 Waipukurau
 06 858 8636

 TOLL FREE
 0800 108 838

www.hbrc.govt.nz

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