

Pond apple

Annona glabra

HABIT



A small tree growing about 3 - 6m tall, but occasionally reaching 15m in height.

TRUNK



Grey bark, usually with a single trunk but multiple-stemmed plants common when several seedlings germinate together. Stems often fuse together giving the appearance of a single trunk.

LEAVES



Alternate leaves, 7 - 12cm long with a prominent midrib. Leaves have a light to dark green upper surface (depending on age) and are paler on the underside.

FLOWERS



Creamy white to light yellow flowers, 20 - 30mm in diameter, not easily seen on the tree. Flowers have three leathery outer petals and three smaller inner petals, with a red inner base.

FRUIT & SEED



The edible fruit looks like a smooth-skinned custard apple, similar in shape to a mango and 5 - 15cm wide. Fruit contains about 140 pumpkin-like seeds.

Pond apple is declared a Class A (to be eradicated) and Class C (not to be introduced) weed in the Northern Territory and is a Weed of National Significance in Australia.

Pond apple is a declared weed in accordance with the *Weeds Management Act*.

Pond apple can spread very quickly and is hard to control once established. Preventing further establishment of pond apple in the Northern Territory is the most cost effective and efficient management strategy. Early identification and treatment relies on receiving reports from members of the public.

Residents are asked to check their properties for this weed and report suspected plants immediately to the Weed Management Branch.

Do not attempt to control or dispose of pond apple yourself. The Weed Management Branch will destroy and remove any pond apple trees. This allows the exact location to be recorded and any necessary survey and control in the vicinity to be undertaken.

The problem

Pond apple was originally introduced into Australia as grafting stock for the closely related custard apple. It is now regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and environmental and economic impacts.

Habitat and distribution

Pond apple is native to the swamplands of North, Central and South America and West Africa. Pond apple has invaded 2000 hectares of the wet tropical region in North Queensland and individual plants are located in northern New South Wales. Pond apple has been found in Darwin and Nhulunbuy in the Northern Territory.

Pond apple is able to grow in the same environment as mangroves. It can withstand flooding and grows well on riverbanks, in disturbed wetlands and in rainforests.

Preventing spread of Pond apple

Spread prevention is the most successful and cost effective way of managing weeds. Pond apple seeds can remain viable for long periods in fresh or salt water. Both the seeds and fruit float and new infestations can occur when floodwater transports seeds and fruit downstream. Animals and birds can spread seeds and there is strong evidence to suggest that the flying fox may also transport the seeds.

To stop seeds spreading, small selected parts of the infestation, located upstream must be treated first. Large infestations need to be controlled by a coordinated approach which includes the development of buffer zones.

Pond apple control

Chemical control

Chemical and concentration	Rate	Situation, method and comments
Glyphosate 360 g/L Various trade names and formulations	15 ml / 1 L	Seedling (individuals and infestation) Foliar spray - apply when actively growing
Triclopyr 240 g/L and Picloram 120 g/L Access®	1 L / 60 L (diesel) 1 L / 60 L (diesel)	Seedling or adult (individuals and infestation) Basal bark < 5 cm stem diameter Cut stump > 5 cm stem diameter
Fluroxypyr 200 g/L Various trade names	1.5 L / 100 L (diesel) 1.5 L / 100 L (diesel)	Adult (individuals or infestation) Basal bark < 10 cm stem diameter, treat up to 45cm from ground Cut stump > 10cm stem diameter

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

Fire is the most economical means of controlling pond apple, however the type of environment where pond apple grows often limits the opportunity to burn.

Pond apple has been pulled out and bulldozed with success. Sites must be monitored and new seedlings removed. In places where weeds are likely to replace pond apple, or in areas prone to erosion, revegetate with native plants.

Follow up

It is vital that follow up works are carried out to control seedling recruitment and regrowth after a site has been treated. Seedlings can generally be pulled out by hand, allowing other indigenous trees to return. Monitoring will need to continue for several years.

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 reporting and regional planning.

For further information on weed management planning, integrated control, herbicide application techniques and monitoring please refer to the [NT Weed Management Handbook](#).