

## Glenelg Hopkins CMA fact sheet

# Controlling Italian Buckthorn

### Overview

Italian Buckthorn (*Rhamnus alaternus*) is a hardy plant which was historically planted as hedges in gardens.

The dense growth forms a barrier and shades out other plants, often preventing natural regeneration of native trees and shrubs. It reproduces via seed from berries.

It is now considered an environmental weed as it is not native to Australia, can grow on a range of soil types in full sun, partial or almost full shade, and displaces native vegetation.

### Invasiveness

Italian Buckthorn is an invasive plant in both disturbed and undisturbed sites and can establish within existing native vegetation.

The ability of this plant to grow in so many different areas demonstrates how invasive this plant is in the natural environment.

It produces large quantities of seed in small red and black berries on female plants. Berries are eaten and spread by birds and can also be spread by possums, foxes, rats and ants.

### Distribution

In the Glenelg Hopkins region, Italian Buckthorn is found in coastal areas and along waterways from Warrnambool in the east to Nelson in the west. It can also be found in other inland areas including Hamilton, Dartmoor and Framlingham.

It is present at Tyrendarra Flora Reserve, part of the World Heritage Listed Budj Bim Cultural Landscape, where it threatens ecological values of the reserve and adjacent waterways – Killara (*Darlot Creek*), Palawarra (*Fitzroy River*) and nearby wetlands.

A mature bush can produce as many as 11,000 berries per plant





## Plant Description

- Perennial shrub or small tree (<5m in height)
- Male and female plants
- Flowers are yellow-green and fragrant
- Fruits are berries which are red (immature) and black (mature)
- Each berry contains 2-5 seeds
- Each mature plant can produce up to 11,000 berries
- Plants have a taproot with 'S' bend
- Leaves are alternate with a serrated edge
- Plant produces a biochemical that prevents other plants from growing under it.



## Attributes and growth patterns

- Drought tolerant (generally >500mm annual rainfall)
- Extremely hardy and can grow in full sun, partial or almost full shade
- Frost tolerant to -15°C
- Found in coastal areas and tolerates salt spray
- Grows in a range of soil types, including both disturbed and undisturbed areas
  - Generally not found in permanent wetlands, but can grow in wet soil
  - Mature plants can survive fire as it has a taproot and can regrow
  - Fire will kill juvenile plants
  - Grazing by sheep, cattle and goats can provide limited control of juvenile plants

## Control options

### Physical

Small seedlings (<30cm in height) in low numbers can be pulled by hand if the taproot can be removed. If the taproot can't be removed, cut and paint or drill and fill from Spring-Autumn.

### Herbicide

The most efficient control for large infestations amongst native vegetation is the basal bark method. It uses triclopyr and picloram mixed with diesel (using diesel rather than water as the carrier). A dribble is applied to the base of the plant to create a ring around the main stem. On small plants, it is applied to the stem tip. Aerial application for large infestations is being investigated and trialed.

### Mechanical

Forestry mulchers have been used in large infestations but have not been used extensively for Italian Buckthorn control. After cutting, stems need to be treated to poison the plants.

***Whichever control method is used PPE, correct application rates/methods and follow up maintenance is required.***



## Further information

More information about the specifics of control options can be accessed on the Glenelg Hopkins CMA website:  
**[www.ghcma.vic.gov.au](http://www.ghcma.vic.gov.au)**

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