Source: <u>http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/weeds/a-z-of-weeds/english-broom</u> Downloaded 23/12/2015.

# **English broom**

Common name: English broom

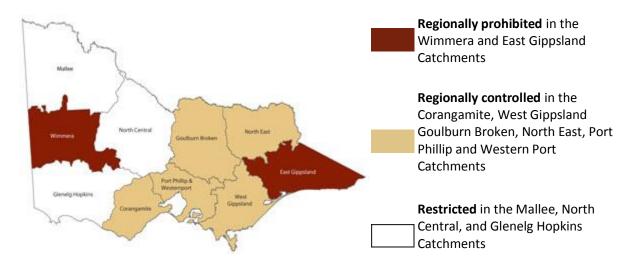
Scientific name: Cytisus scoparius (L.) Link

Other scientific name/s:

Other common name/s:

# **Plant status**

# **Catchment management authority boundaries**



Read more about the classification of invasive plants in Victoria

# **Plant images**







# **Plant biology**

Appearance	Shrub (or bush)									
Description	English broom is a large deciduous shrub growing to 3 m high.									
Stems	English broom has numerous erect, woody stems that are green to brownish-green and prominently ridged.									
	Young stems remain green for about three years and actively photosynthesise before turning brown.									
Leaves	English broom has trifoliate leaves that occur either singularly or in clusters. They have short stalks and scattered hairs on the upper surface and are softly hairy on the under side.									
	Leaves are bright green, deciduous under dry conditions and over winter. New leaves are produced in spring around the same time as flowering commences.									
Flowers	Flowers of English broom are bright yellow, pea-like and sometimes with red markings in the centre. They grow to 15-25 mm long and occur singly or in pairs in the axils.									
	Young plants do not flower until the third year of growth.									
	Peak flowering is from October to December, but flowers can appear sporadically throughout the year.									
	English broom produces flat, brown or black pods as fruit that are hairy on the edges, mostly 25-60 mm long and 8-10 mm wide.									
Fruit	The pods ripen during summer and burst open due to heat, ejecting the seed up to 4.5 m distance.									
	Some pods curl up after the seed is ejected.									
Seeds	Seeds of the English broom germinate in both autumn and spring.									

# **Growth and lifecycle**

# Method of reproduction and disperal

English broom is spread only by seed. Most seeds fall within 1 m of the parent plant but seed pods can explode in the heat of summer and eject seeds up to 4.5 m away from the parent.

Seeds in mud can attach to vehicles, machinery, footwear and animals. Floodwaters and animals can also contribute to spread.

English broom flowers prolifically, but only a small proportion of the flowers develop into fruits.

#### Rate of growth and spread

English Broom requires two to three years growth before flowering and commonly lives for 10-15 years but may potentially live up to 25 years.

## Seedbank propagule persistence

The seed of the English broom, when stored dry, can remain viable for more than 80 years.

More than 80 per cent of buried seed can remain dormant and viable after 45 months. This can result in a large soil seed bank under mature plants.

The seed coat needs to be ruptured or damaged before the seed will germinate.

Fire can stimulate seed germination resulting in dense infestations of seedlings.

#### **Preferred habitat**

English broom prefers moderate to high rainfall areas of humid temperate regions, often on steep slopes at altitudes of 300-800 m above sea level.

It is found mainly on slightly acidic soils and occurs on roadsides and wasteland, sclerophyll forests, heathlands, woodlands, riparian, alpine and sub alpine areas.

#### Distribution

In Victoria, English broom is found on grazing lands in the southern, central and north-eastern regions, central highlands and many public land reserves and parks.

## **Growth calendar**

The icons on the calendar below represent the times of year for flowering, seeding, germination, the dormancy period of English broom and also the optimum time for treatment.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flowering												
Seeding												
Germination			8	8	8				8	8	8	
Dormancy												
Treatment					<b></b>	<b></b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	

# **Impact**

## Impact on ecosystems and waterways

English broom establishes on disturbed areas such as timber plantations, quarries and road construction sites. It has the ability to become the dominant species and smother native vegetation, particularly after

fire events, due to strong seedling recruitment. The weed also out competes poor or degraded pasture and reduces agricultural production, while providing harbour for a range of pest animals.

# Management

## Prescribed measures for the control of noxious weeds

- Application of a registered herbicide
- Physical removal

Important information about prescribed measures for the control of noxious weeds

## Other management techniques

Changes in land use practices and spread prevention may also support English broom management after implementing the prescribed measures above.

## References

Parsons, W.T. and Cuthbertson, E.G. 2001, Noxious weeds of Australia, 2nd edn, Inkata Press, Melbourne & Sydney.

Department of Primary Industries, Regionally Prohibited Weed Information Sheet - English Broom, 2010.