

# Primary Industries, Water, and Environment

## *Service Sheet*

PRODUCED BY THE DEPARTMENT OF PRIMARY INDUSTRIES, WATER, AND ENVIRONMENT

Revised 11/02  
110 / 97  
Agdex 647

### **Blackberries**

*(Rubus fruticosus L. agg.)*

#### **Identification and Characteristics**

Blackberry is the name commonly used for a range of closely-related brambles.

Blackberry plants in Tasmania vary considerably in factors such as size, vigour, leaf and cane shape, height of thickets, and ability to spread by rooting at cane tips. This variation also affects the susceptibility of blackberry types to control measures such as herbicide use and biological control.

At least nine "species", including the distinctive cutleaf blackberry, are known to occur in Tasmania, but there may be others not yet identified.

Blackberries commonly form dense thickets that may reach two or more metres in height and cover tens or even hundreds of square metres in area. The plant has prickly stems or canes which grow from a perennial crown up to 150mm in diameter. The canes may be erect, arching or trailing and they can reach six metres in length. Individual canes normally live for two or three years before dying off to be replaced by new growth. In an established thicket, up to 70 per cent of the growth may consist of dead canes.

#### **Distribution**

Blackberries occur in all settled areas of the State. They grow most vigorously in higher rainfall areas and may be restricted to the edges of creeks and rivers in the drier parts.

The plant flourishes on waste and neglected land where it creates a fire hazard and a haven for vermin. It is particularly prevalent along waterways and on roadsides. Often in association with bracken it can quickly over-run large areas.

Under favourable conditions it is capable of spreading in pasture.

#### **Dispersal**

The berries are eaten by many birds and animals. The seeds survive in the droppings and can germinate in autumn or spring.

Birds are largely responsible for spreading blackberries from one site to another, but a lot of seed is also distributed by water in creeks and rivers.

The canes of blackberries are able to send out roots at the tip where they touch the ground and this is one way in which uncontrolled patches of blackberries keep getting bigger. Apart from 'tip layering', blackberries will grow from root suckers and root fragments. Their extensive root system and their ability to send up new shoots make them very persistent.

#### **Status Under the *Weed Management Act 1999***

Blackberries are declared weeds in Tasmania, largely due to their impacts on the environment and agricultural productivity. As such, the importation, sale and distribution of these plants are prohibited. The legal responsibilities of landholders and other stakeholders for this declared weed are specified in a statutory weed management plan available from the DPIWE.

#### **Control**

##### ***Physical Control:***

##### ***Pasture Competition***

Competition from well managed, properly fertilised pasture will help prevent the establishment and spread of blackberries in grazing land.

### **Grazing**

Goats readily eat blackberries and are capable of destroying large infestations.

Sheep are useful to some extent in the control of blackberries because they eat seedlings and young tip growth<sup>4</sup>, however young sheep and goats may become entangled in blackberry thickets. In Tasmania, significant numbers of stock die from this each year.

Cattle exert little or no grazing pressure on blackberries and are relatively ineffective in controlling them.

### **Cultivation**

Where machinery can be used, established blackberry thickets can be dozed out and the area then deep-cultivated to destroy the root system.

Repeated cultivation is necessary to destroy seedlings and regrowth before the area is sown to pasture or crop.

Seedlings and regrowth from root fragments may have to be sprayed for one or two seasons afterwards.

### **Slashing**

Repeated slashing may help to limit the spread of blackberries but it is not an effective method of control. Blackberry canes growing along the ground will often be missed completely by the slasher blades.

### **Biological Control:**

The rust *Phragmidium violaceum*, which was illegally introduced into Australia in 1984, is now prevalent throughout Tasmania. The susceptibility of blackberries to the rust varies markedly with species, habitat and seasonal conditions. In most cases, the rust will not provide adequate control and other control measures will be necessary. Improved strains of the rust are being examined interstate for possible release.

Blackberries slightly or moderately infested with rust can still be treated with herbicides if required. In many situations, more effective control can be achieved from the combination of rust disease and herbicide. However, if bushes have been severely defoliated by the rust, herbicide application may not be effective.

### **Chemical Control:**

The effectiveness of all foliar applied herbicides will be reduced significantly if the blackberries are moisture-stressed or grazed heavily at the time of application.

Regrowth after slashing, burning, or grazing should be at least 500mm high before herbicide application.

With all herbicides, complete coverage of all canes and leaves, including those growing from suckers away from the main bush, is essential for maximum effectiveness.

Do not slash or burn treated bushes for at least six months after herbicide application.

Several of the herbicides registered for use on blackberries can cause significant damage to surrounding plants if not used correctly. Always refer to the product label before using any herbicide and carefully follow all directions.

Herbicide spraying of blackberries will achieve greatest effect when carried out in the period from petal fall to leaf fall. Generally this runs from December to May in Tasmania.

### **Triclopyr**

Extensive trials in Tasmania have shown that this is the most cost-effective herbicide for blackberry control.

Triclopyr is absorbed through the foliage and stems and translocated to the crown and roots. Grasses are tolerant to triclopyr but most broadleaf plants, including clover, are susceptible.

Where foliar application of herbicides to blackberry is not practical, basal treatment may be used. A solution of 4.8g triclopyr per litre of diesel distillate or kerosene (e.g. 8 ml of "Garlon 600®" per litre of diesel distillate or kerosene) can be sprayed or painted onto the lower 300mm of canes and the above-ground portion of the crown after most of the top growth has been removed mechanically.

### ***Metsulfuron-methyl***

Metsulfuron-methyl is a highly effective herbicide for blackberry control. Treated bushes are slow to show the effects of the herbicide and may not show any symptoms until the growing season following application.

Little or no regrowth will occur in the season after treatment but strong regrowth from the periphery of the bush may occur two years after treatment. This regrowth must be treated to avoid the re-establishment of the bush.

Metsulfuron-methyl may be used in urban areas and near crops where triclopyr is unsuitable, or when bracken or gorse is also to be controlled at the same time.

Grasses are tolerant to metsulfuron-methyl, but clover is susceptible.

### ***Glyphosate***

Glyphosate can be used for blackberry control in situations where its non-selective activity is acceptable or where care can be taken to prevent the material coming into contact with desirable shrubs, plants or grass. Overall it is less effective on large blackberry bushes than triclopyr and metsulfuron-methyl

### ***Hexazinone***

This product is useful for controlling isolated plants or small patches in industrial areas, roadside drains and similar places where its non-selective and persistent properties are useful.

Hexazinone must not be used in the root zone of desirable plants or trees nor on slopes where runoff water may carry it into their root zone.

It should not be applied when the soil is dry.

### ***Contamination of Blackberry Fruit***

Most herbicides may leave residues in the fruit of treated bushes.

**Where the public has free access to blackberry bushes, herbicides must not be applied to plants carrying mature or near mature fruit. To do so is in contravention of label directions and is illegal.**

Some herbicides are toxic to bees. As a general rule, avoid applying herbicides when and where bees are foraging. Always read the label.



**Bee Careful !**

**Note:**

These herbicide recommendations are made subject to the product being registered for that purpose under relevant legislation. It is the user's responsibility to check that registration or an off-label permit covers the proposed use. Always read the herbicide label. If in doubt, check with the Registrar of Chemical Products, Department of Primary Industries, Water and Environment. Statewide Freecall 1300 368 550.

**Table 1. Blackberry herbicide properties and recommendations for use**

Herbicide (Active ingredient)	Commercial product (Content of active ingredient)	Application rate of Commercial product per L	With-holding period	Comments
Triclopyr <sup>1</sup>	GARLON 600® (600 g/L)	0.85 - 1.7 mL	Nil	Apply to foliage from petal fall to leaf senescence.
	GRAZON DS® (300 g/L Triclopyr, 100 g/L Picloram)	3.5 - 5.0 mL	Nil	Use higher rate on large bushes when complete wetting is difficult.
Glyphosate <sup>1</sup>	ROUNDUP® (360 g/L)	10 - 13 mL	Nil	Apply to foliage from petal fall to leaf senescence. Add wetting agent.
	GLYPHOSATE 360® (360 g/L)			
	TROUNCE BRUSH-PACK® (835 g/L Glyphosate, 10 g/L Metsulfuron-methyl)	1.7 g	Nil	As above.
Metsulfuron-methyl	BRUSH-OFF® (600 g/Kg)	0.1 g	Nil	Apply to foliage from petal fall to leaf senescence. Add wetting agent.
Hexazinone <sup>2</sup>	a) VELPAR L® (250 g/L)	a) liquid: 4 mL spots per small crown	Nil	Apply in spring or autumn when soil is moist. Single crown bushes up to 1 metre tall.  a) soil injected  a) & b) to ground around base of canes
	b) VELPAR 20 G® (200 g/Kg)	b) granules: 4g/m <sup>2</sup> beneath bushes		

<sup>1</sup> More dilute formulations are available for use in home gardens.

<sup>2</sup> May show up to 24 months residual activity against crops and pasture species. Seek advice if the treated area is to be sown within this time after treatment.

**NB: Do not apply any herbicide to bushes that bear mature or near-mature fruit.**