

Grey willow

Salix cinerea



A native of Turkey, Azerbaijan, Western Siberia, Kazakhstan, and much of Europe, grey willow is a deciduous, rapidly growing small tree or shrub that can alter natural watercourses, cause native vegetation reduction and cause native fauna losses.

Legal requirements

Grey willow is a category 3 restricted invasive plant under the *Biosecurity Act 2014*. You must not give away, sell or release into the environment. The Act requires everyone to take all reasonable and practical measures to minimise

the biosecurity risks associated with invasive plants under their control. This is called a general biosecurity obligation (GBO). This fact sheet gives examples of how you can meet your GBO.

At a local level, each local government must have a biosecurity plan that covers invasive plants in its area. This plan may include actions to be taken on grey willow. Some of these actions may be required under local laws. Contact your local government for more information.

Life cycle

Grey willow reproduces mainly by seed, as its branches do not break easily. Flowering occurs during September to October.

Methods of spread

It can spread by stems and broken branches that form roots when in contact with moist soil, and fragmentation is the main method of dispersal.

Distribution

Grey willows prefer temperate to tropical climates, and can tolerate a range of soil types and conditions. Seedlings generally require continually moist, barren sites to successfully establish. It can be found in agricultural areas, coastland, wet forests, riparian zones, urban areas and wetlands.

Control

Small seedlings can be hand-pulled. Large plants should only be manually removed in dry areas, as broken branches can easily form new plants when in contact with moist ground.

Follow-up monitoring and control work is required for at least three to five years after initial control efforts.

Herbicide control

Cut stump and stem injection are the preferred methods for herbicide application as they prevent the run-off of herbicides into waterways.

Before using any herbicide, always read the label carefully. All herbicides must be applied strictly in accordance with the directions on the label.

Operators should check if the land is in a hazardous area as defined in the *Agricultural Chemicals Distribution Control Act 1966* prior to applying herbicides containing an ester formulation of picloram (e.g. Access). Cut stump application of these herbicides in hazardous areas must occur more than 100 m away from crops that are susceptible to the herbicide.

Table 1. Herbicides registered for the control of grey willow

Situation	Herbicide	Rate	Comments
Non-agricultural areas, around buildings, commercial and industrial areas, domestic and public service areas, rights-of-way, agricultural areas, aquatic areas and pastures	Glyphosate 360 g/L (e.g. Roundup Biactive) and other formulations	1.3 L per 100 L water	Foliar application For trees up to 2 m high Spray to wet all foliage
		Undiluted, 2 mL per cut	
		Undiluted	
Agricultural non-crop areas, commercial and industrial areas, fence lines, forestry, pastures and rights-of-way	Triclopyr 240 g/L + Picloram 120 g/L (e.g. Access)	4 L per 60 L diesel or other suitable carrier as per product label	Cut stump Apply immediately after cut is made. Complete control may not occur due to the multi-stem growth of plant and difficulty treating all stems.
Non-crop areas, including native vegetation, conservation areas, gullies, reserves and parks.	Picloram 44.7 g/L + Aminopyralid 4.47 g/L (e.g. Vigilant II)	Undiluted, 3 to 5 mm thick layer per cut	Cut stump For small plants or saplings. Cut stems close to ground and immediately apply herbicide over the cut surface. On stems <20 mm in diameter, apply 3 mm thick layer of herbicide, for stems >20 mm in diameter, apply a 5 mm thick layer. In the case of multi-stem plants treat at least 80% of stems including all main stems
		Undiluted, 5 mm thick layer per cut	Stem injection For trees, apply a 5 mm layer of herbicide per cut

Read the label carefully before use. Always use the herbicide in accordance with the directions on the label.



Fact sheets are available from biosecurity.qld.gov.au. The control methods recommended should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, the department does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

