

Kudzu

Pueraria montana var. *lobata*



Kudzu is a vine native to Asia. While it has been present in North Queensland for some time, kudzu has been found at a few locations in South East Queensland. For some reason (possibly climatic), kudzu appears to grow much more aggressively in South East Queensland than in North Queensland.

Kudzu can grow and spread rapidly, competing with, and eventually smothering, native vegetation as well as tree crops. The vines can become quite heavy, breaking any plants they happen to grow on.

Left unmanaged, kudzu vines can also damage buildings, overhead wires and other structures. In the United States, kudzu causes an estimated \$50 million damage each year and infests 2–3 million ha of land. If it is not controlled and prevented from spreading further in Queensland, kudzu could become a major pest here as well.



Legal requirements

Kudzu is a category 3 restricted invasive plant under the *Biosecurity Act 2014*. It must not be given away, sold, or released into the environment. The Act requires everyone to take all reasonable and practical steps to minimise the 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 certain species. Some of these actions may be required under local laws. Contact your local government for more information.

Description

Kudzu is a perennial vine that grows rapidly and can reach 20–30 m in length. Each summer, kudzu runners can grow to a length of 20 m at a rate of about 30 cm per day. Vines can climb up to 30 m, completely covering trees, buildings or other supporting objects.

Kudzu has compound leaves with three broad leaflets, each up to 10 cm across. Leaves are dropped during winter in South East Queensland. The roots of kudzu are fleshy—the taproot can grow to over 1.8 m long, 15 cm in diameter and can weigh up to 180 kg.

Flowers are purple to pink, fragrant, about 1–1.5 cm long and are produced in long racemes resembling pea flowers. Seeds are rarely produced but seed pods are brown, flat, hairy, 5 cm long and each pod contains 3–10 small, hard, oval seeds.

Kudzu generally spreads from stolons or runners, prefers full sun and is generally intolerant of deep shade.

Life cycle

Flowers in late summer which develop into bean like pods that burst open to release seed. It is believed to have low seed viability in Australia and most grown vegetatively.

Kudzu will take root where a node comes in to contact with the earth. Kudzu is capable of growing up 30 cm a day, 20 m per year and can climb trees to a height of 30 m.

Methods of spread

Kudzu actively spreads along watercourses by seed or vegetatively. The main method of spread from area to area is by people planting it for a range of reasons.

Habitat and distribution

Kudzu is native to north Asia, including Japan and was introduced into Australia as an ornamental plant and pasture legume. It is a serious weed of southern states of America and known as ‘the plant that ate the south’.

Kudzu has become a major environmental weed in parts of the New South Wales North Coast and has the potential to become a significant threat to natural ecosystems in other areas. In NSW significant but controllable infestations occur in the north and mid north coast regions. In Queensland infestations have been found at the Gold Coast and in North Queensland.

In Asia and the USA kudzu is reported to grow in a wide range of soils. Current infestations in Australia are largely in riparian zones originally supporting subtropical and dry rainforests. Kudzu prefers full sun and is generally intolerant of deep shade.

Control

Managing kudzu

The GBO requires a person to take reasonable and practical steps to minimise the risks posed by kudzu. This fact sheet provides information and some options for controlling kudzu.

Manual control

Seedlings and smaller plants can be hand pulled. Ensure tubers are all dug up. Bag and dispose of this pest plant at the local council tip, but never place in green waste. Wear gloves, as the leaves and stems are hairy and may cause skin irritation.

Herbicide control

Herbicide control, such as foliar spray, may be required for larger infestations of kudzu.

There is no herbicide registered for the control of kudzu in Queensland; however, off-label use permit PER14849 allows for the use of various herbicides for the control of environmental weeds in non-agricultural areas, bushland, forests, wetlands, and coastal and adjacent areas.

See Table 1 for treatment options allowed by the permit.

Prior to using the herbicides listed under PER14849 you must read or have read to you and understand the conditions of the permit. To obtain a copy of this permit visit apvma.gov.au.

For successful control of kudzu, the extensive root system must be destroyed. Cattle and goats can successfully graze on the leaves, which allow access to destroy the tubers.

Further information

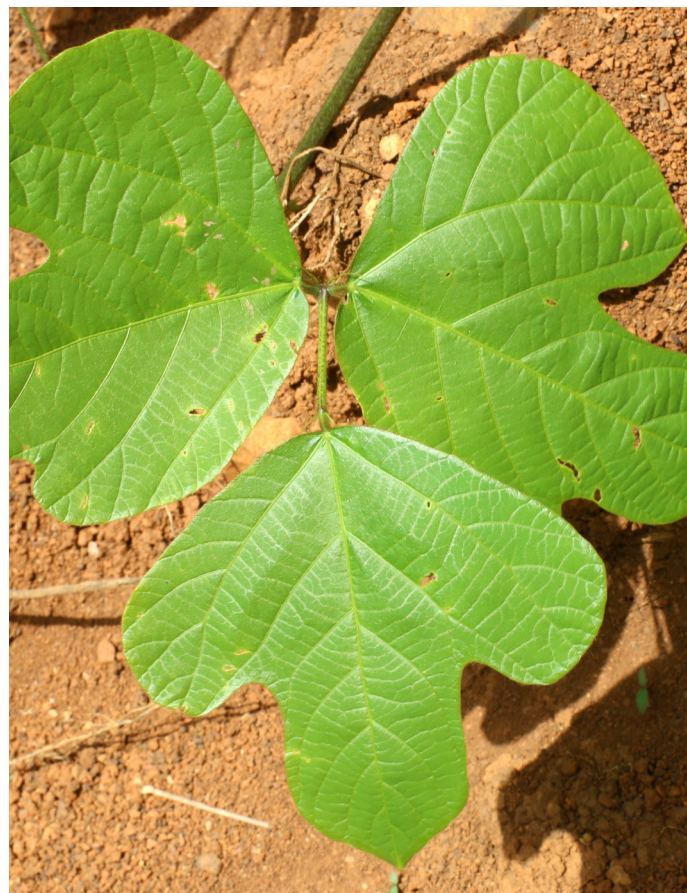
Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit biosecurity.qld.gov.au.

Table 1. Herbicides for the control of kudzu

Situation	Herbicide	Rate	Registration status	Comments
Non-crop areas non-agricultural, native vegetation and pastures Apply by ground-based application equipment only	Triclopyr 600 g/L (e.g. Garlon® 600)	Rate for knapsack/4WD motorbike: 50 mL per 15 L water For high volume: 330 mL per 10 L water	APVMA permit PER14849 (permit expires 31/08/2024)	Foliar spray application Thoroughly wet all foliage to the point of run-off
	Metsulfuron-methyl 600 g/kg (e.g. Brush-off®)	10 g per 100 L plus addition of a suitable non-ionic surfactant as per label rate		Foliar spray application Thoroughly wet all foliage to the point of run-off
	Triclopyr 300 g/L + Picloram 100 g/L Aminopyralid 8 g/L (e.g. Grazon® Extra)	500 mL per 100 L water or 1:200		Foliar spray application Thoroughly wet all foliage to the point of run-off
	Clopyralid 300 g/L (e.g. Lontrel®)	2 L/ha or 1:100 with water		Foliar spray application Thoroughly wet all foliage to the point of run-off
	Imazapyr 150 g/L + Glyphosate 150 g/L (e.g. Arsenal Xpress)	12.5 mL per 1 L water		Foliar spray application
	Imazapyr 150 g/L Glyphosate 150 g/L (e.g. Arsenal Xpress)	1:1 with water		Cut stem/stem injection/crowning Apply directly to cut surface of stem
	Picloram 43 g/kg (e.g. Vigilant II®)	Use undiluted		Cut stem/stem injection/crowning Apply directly to cut surface of stem
	Glyphosate 360 g/L (e.g. Roundup®)	1:2 with water		Cut stem/stem injection/crowning Apply directly to cut surface of stem
	Fluroxypyr 333 g/L (e.g. Starane® Advanced)	300 mL per 100 L water		Foliar spray application
	Fluroxypyr 333 g/L (e.g. Starane® Advanced)	1:20 with water		Cut stem/stem injection/crowning Apply directly to cut surface of stem
	Fluroxypyr 333 g/L (e.g. Starane® Advanced)	1:30 with kerosene		Basal bark application
	Fluroxypyr 333 g/L (e.g. Starane® Advanced)	Use undiluted		Cut stem/crowning
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®)			Cut stem/stem injection/crowning Apply directly to cut surface of stem

APVMA off-label permit PER14849. Herbicides for the control of kudzu in non-agricultural, native vegetation and pastures (Queensland) apply by ground-based application equipment only. It is a requirement of a permit that all persons using the products covered by this off-label permit comply with the details and conditions listed in the permit.

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



This fact sheet is developed with funding support from the Land Protection Fund.

Fact sheets are available from Department of Agriculture and Fisheries (DAF) service centres and our Customer Service Centre (telephone 13 25 23). Check our website at biosecurity.qld.gov.au to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet 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, DAF does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.