

noxious weed

beating lantana on the NSW South Coast

Lantana (*Lantana camara*)

Lantana, a native of Central America, is a prickly multi-stemmed shrub. It is usually 2-3 metres high but can reach much higher by scrambling up into trees, using its prickly branches to hook on.

The rough textured leaves smell unpleasant when crushed.

It forms large, impenetrable thickets. As seed is dispersed mainly by birds, these tend to be around trees and on edges of forest. It also comes up in pasture along fences and around rock outcrops where there may be bare ground.

Clusters of small tubular flowers come in a range of colours but south of Sydney the most common wild form is known as pink-flowered, though all forms include some yellow flowers in the centre of the cluster.

Berries are produced in clusters and ripen from green to black. A large plant can produce 12,000 of these per year.

Creeping lantana (*Lantana montevidensis*) is a much smaller plant which rarely gets more than 50cm high. It has mauve flowers and has been popular as a garden plant. However, it has become weedy north from Sydney and growing or selling it is now banned anywhere in NSW.

Hybrid lantana may be derived from *Lantana camara* or *L. montevidensis*. Flowers come in a range of pure (yellow, red, mauve, white) or mixed colours. The plants are less prickly and more compact than their wild counterparts, but otherwise the same in appearance. It is also banned from sale or cultivation.

The problem

Lantana is listed as a noxious weed under Control Order 28. It is both an agricultural and an environmental weed on the coast and ranges of eastern Australia, from north Queensland to southern NSW, with outlying infestations in the Northern Territory.

A survey of coastal farmers in 2005-06 found the cost to grazing enterprises from loss of pasture and control costs totalled \$121.4 million for Queensland and NSW at that time.

The presence of lantana was also found to reduce property values.

Lantana frequently infests the hard to reach areas of coastal farms, such as steep slopes and rocky areas, making control expensive and difficult.

All parts of *Lantana camara*, but particularly leaves and green berries are toxic to livestock, pets and humans (and presumably some wildlife although birds eat the berries). Stock do browse on it, and develop some tolerance as long as only small quantities are consumed at any one time. Stock which are new to lantana are more likely to be poisoned. Creeping lantana is also toxic, but less so.



Symptoms of stock poisoning include loss of appetite, constipation, blood in faeces, frequent urination and severe facial itching, particularly in white-faced cattle. The resulting rubbing can result in blindness and serious injury.

Poisoning may be fatal if not treated in humans, pets and livestock.

Dense thickets restrict movement for livestock and humans. Contact with the prickly stems is painful and fine particles released from the leaves and stems by brushing through them can irritate the eyes and respiratory tract.

As an environmental weed, lantana replaces native vegetation, and actively excludes it by producing chemicals which inhibit growth and germination in other plants. The dense growth habit also has a strong shading effect and the root system competes with other plants for water.

Nation-wide lantana is a potential threat to up to 279 plants and 93 animals listed as rare or threatened. On the NSW South Coast it is an immediate threat to some rare rainforest plants such as the white-flowered wax-plant (*Cynanchum elegans*) and to two shrubs with restricted distributions, *Zieria tuberculata* around Gulaga/Mt Dromedary and *Zieria granulata* in the Illawarra.

Dense thickets around remnant native vegetation in paddocks may be partly beneficial, if it stops livestock getting into rainforest patches. However, a fence would be better!

Lantana is a fire hazard. Green plants may be difficult to ignite, but in hot, windy conditions it burns fiercely, increasing the impact of fire on the native vegetation it is growing among.

Lantana grows best in areas with a high rainfall and fertile soils. However, it has spread into areas which are seasonally quite dry, such as the Darling Downs in Queensland, and it is actively spreading southwards on the far south coast, and into areas with less favourable soils. It has come nowhere near occupying its full potential range in Australia but if it does so the costs, both financial and environmental, will be massive.



J Miles

Lantana

for more information please contact:

Illawarra District Noxious Weeds Authority	(02) 4233 1129
Shoalhaven City Council	(02) 4429 3111
Eurobodalla Shire Council	(02) 4474 1000
Bega Valley Shire Council	(02) 6499 2222



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Lantana garden hybrid



Creeping lantana

What can I do?

Prevention:

It is vital to prevent lantana increasing its range, and small infestations are much easier to treat than large ones. Tackle isolated plants quickly, when control is much easier and cheaper. Do not assume it will only appear in open areas. Keep watch on all your bushland for new plants appearing if there are infestations anywhere nearby. It is unlikely to appear in deep shade, such as intact rainforest, but the open canopy of eucalypt forest or regrowth in ex-pasture is not much of an impediment to lantana germinating and getting established, and rainforest edges are a very common location for infestations. Young plants up to about a metre high are often quite easy to hand-pull, unless soil is dry.

Do not grow any sort of ornamental lantana. Hybrid lantana does not produce seed if grown in isolation, but if there is wild lantana nearby it may exchange pollen with it to produce viable seed. Resulting offspring will not be sterile. If the hybrid lantana is carrying genes for greater cold tolerance or drought tolerance, these may be passed into the wild population, increasing its weed potential. Growing or selling any type of lantana is illegal throughout NSW now. If you see it for sale, inform your local Council weeds officers.

For established infestations:

A range of different techniques may be needed for different parts of the property and levels of infestation.

Reducing the bulk of large infestations before spraying can reduce the amount of herbicide needed. Regrowth is then sprayed when about a metre high. Possible methods include

mechanical removal (tractor blade, bulldozer) and fire. Neither method is really suitable for use where there is native vegetation mixed through the lantana. Fire will not kill lantana unless it is very hot, and it may open up adjacent fire-sensitive vegetation like rainforest to greater infestation. As an initial knock-down in pasture it may be useful.

Goats are a good, if slow, method of control, as long as they are not forced to feed entirely on lantana (as it is toxic). They need good fencing which will reduce their usefulness in rough terrain.

Use of a selective woody weed herbicide will reduce the off-target damage. Non-selective herbicides like glyphosate can leave large bare patches which are likely to be colonised by more weeds.

An alternative to the traditional high volume spraying is the splatter gun. This method delivers a stream of large droplets of more concentrated herbicide, which reduces drift and off-target damage. It is very useful for hard to access areas like steep slopes, since a given volume of spray will go a lot further with this method. Only a few squirts per plant are needed, rather than spraying the whole plant. It is best used on dense infestations.

Spraying should be done when plants are actively growing, that is, when soil is moist and the overnight temperature stays above 15°C. Flowering is a good indicator of active growth. Spray when plants are dry or nearly so, but before it gets too hot (pre-10a.m. or after 3 p.m.).

If using herbicides be sure to read the label and heed the label. Consult your local Council weeds staff or herbicide supplier for more detailed information about control methods.

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Poison peach (*Trema tomentosa*)

The flower shape and strong smell of lantana leaves is unique, but one native shrub or small tree, **poison peach (*Trema tomentosa*) has similar looking leaves.** Poison peach leaves are narrower, less raspy to the touch and not smelly. Poison peach is a useful source of food for birds, producing tiny black berries. However, it is also poisonous to stock.

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Poison peach

Lantana

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native look-alike