
USING DICAMBA TO KILL CAT'S CLAW CREEPER

Dicamba is known by the trade name of Kamba 500[®], which contains 500g/L of the active ingredient. There are other products that contain dicamba as an active ingredient, such as some of the broadleaf lawn weed herbicides, but these cannot be used as a substitute for a 500g/L product.

Dicamba is a widely used herbicide in agriculture and horticulture, but not so in environmental weed control.

So, getting the best out of using dicamba requires some knowledge of how it works and what to do / what not to do. This infosheet is aimed at giving you a better picture of how to go about getting the best results.

the chemical

Dicamba is a selective herbicide, controlling annual and perennial broadleaf weeds, but not killing grasses (if used at the recommended rate). Dicamba is a synthetic plant growth hormone, acting as a growth regulator.

It has low toxicity to animals and is rapidly excreted in the urine. It has not been found to accumulate in animal tissues.

Dicamba is primarily applied as a foliar spray, however it can be taken up by plant roots if applied to the ground. The chemical has a short half life of about 14 days, and is easily broken down in the soil by microbial action.

However, if the soil is dry and low in microbe activity, the chemical can persist for up to 4 weeks. This, combined with the fact that it can be root absorbed, means that care needs to be taken when it is used around plants with a lot of surface roots and if the soil is low in biological activity.

Compounding this is the fact that the chemical doesn't bind with soil particles and can be leached through the soil into the root zone of most plants.

The important message here is that you need to make sure that you only spray to the point of run-off and not contaminate the ground with excessive amounts of spray mixture. Employing sensible spraying practices will ensure that this doesn't happen.

It is also a water soluble herbicide and won't mix with oil-based products like diesel.

toxicity to animals

Studies have found that it is only slightly toxic to birds, has low toxicity to fish and aquatic invertebrates, and is non-toxic to bees. It has been rated as posing little threat to wildlife

It has a low toxicity to humans. Contact with the skin can cause skin rashes, especially to people with sensitive skin.

how best to use dicamba against cat's claw creeper

Dicamba can be used effectively to treat cat's claw creeper as a foliar spray only.

The only safe way to foliar spray cat's claw creeper is when it is growing over the ground or up to 1m into small trees and shrubs. Once the vines get up into trees, then foliar spraying is not the preferred control option.

As dicamba is a selective herbicide, it won't kill grasses and some other strap-leaved plants.

However, extreme care must be taken if you are spraying around desirable trees and shrubs that have a shallow root system, as research has shown that non-target plants can absorb the chemical through their roots if the spraying has been too heavy and a shower of rain comes across not long after (washing the chemical into the shallow root zone).

For this reason, it isn't recommended that you use dicamba against cat's claw creeper if it is growing densely on the ground in rainforest-type vegetation. The option here would be to use a glyphosate based herbicide.

The best situations to use dicamba in are to spray tuber regrowth; to spot-spray small infestations; or to spray large amounts of prostrate cat's claw creeper growth across a grassy area.

If the cat's claw creeper vine growing up trees and shrubs is thinner than a pencil, an effective technique is to cut these vines without treating them, and let the tuber resprout. When enough new growth is on the ground, you can then foliar spray the leaves on the ground.

The mixing rate for foliar spraying with dicamba is 4ml of a 500g/L dicamba herbicide per 1 litre of clean water.

An extra wetting agent isn't really necessary, but if you feel so inclined, the addition of a sticking agent (such as Codacide Oil, Synertril Oil or Spraytech Oil) which sticks the spray solution to the leaves, would be the best option.

Don't use soaps or detergents as a wetting agent, as these will bind with the herbicide chemical and make the spray solution ineffective.

Spray as many of the leaves as you can to 'the point of run-off'. This is where the leaves are wet but not dripping spray solution into the soil.

Take care around waterways. Don't allow the spray mixture to contaminate water. If possible spray from the water edge back towards the land.

how to tell if it's working

Results from foliar spraying may take a couple of weeks to become evident, and it may take a couple of months for the vines to look like they are dying off – depending on the growing conditions.

If you've foliar sprayed, it is importantly that you don't damage the plants. Don't cut them with a brush-cutter; don't pull them out of the trees; don't spray them with other chemicals; don't burn the area. This will only stop the herbicide from doing its work properly.

Cat's claw creeper is a palatable stock food, so don't let grazing animals eat the treated material before the plant has had a chance to translocate it through its system. If possible, exclude stock for at least a week.

The underground tubers may resprout after the herbicide treatment. This is a natural response by the plant to the stress of dying. The plant is trying to survive. Don't worry about these shoots, as you can't really treat them until they grow more leaves, and they may still die as the remaining herbicide in their system kicks in. The tell-tale signs of dicamba effects on regrowth are that the growth will be misshapen.

So, the consistent message is ... be patient and have faith. Give the herbicide at least 3 months to do its stuff.

follow up ... follow up ... follow up

Don't expect dicamba to be the silver bullet. You'll need to monitor the problem and be prepared for follow-up control over the next couple of years at least.

That may involve tracing the vines that you've missed – they'll be easy to find as they'll have healthy green leaves six months after the initial treatment.

You'll need to get rid of the germinating seedlings. This can be by spot spraying or by pulling/digging. But if you wish, these can be left for a while, as they tend to grow as a ground cover for the first part of their lifecycle.

The best thing about cat's claw creeper is that the seeds are short lived, and the soil seed bank will be exhausted after 12 months.

The resprouting tubers should not be treated as soon as they appear. You really need to leave them for an extended period of time to ensure that enough leaves are available to absorb an adequate amount of herbicide to kill the remaining tuber. Respraying too early will just be a waste of your time and herbicide.

As with using any herbicide, read and follow the directions on the label. Wear appropriate protective clothes – at least a long sleeved shirt and long pants. Store it appropriately and securely.

More information on dicamba can be found on the following websites:

- http://www.pestgenie.com.au/default.asp?V_DOC_ID=872
- <http://www.tec.org.au/member/tec/projects/tcye/tox/Dicamba.html>

For more information contact:
Pest Management Coordinator
Sunshine Coast Regional Council
5420 8200