Using glyphosate to kill cat’s claw creeper

Glyphosate is known by numerous trade names – including Roundup, Weedmaster Duo, Glypho, Zero, Cleanup and many more.

It is the most commonly used all-purpose herbicide for killing a wide variety of weeds.

Getting the best out of using glyphosate requires some knowledge of how it works and what to do / what not to do. This fact sheet is aimed at giving you a better picture of how to go about getting the best results.

The chemical
Glyphosate basically works by disrupting the plants biochemical systems that allow it to produce foods and nutrients for its survival. As a consequence, the plant 'starves to death', as it can’t produce energy to survive.

The active ingredient in glyphosate is rapidly and tightly absorbed to soil and organic matter. There is no soil activity due to this rapid absorption. Biodegradation is by microbial action and the breakdown rates vary with soil conditions and the micro-organism population.

Most of the commonly sold glyphosate products have an in-built wetting agent. This means that generally, no extra wetting agent will need to be added to the herbicide mixture for the most common uses.

It has been found that the wetting agents in the original glyphosate products (eg ‘Roundup®’) have the ability to harm some types of frogs. Therefore, if the product is being used on water, around water or where water will flow within 4 days of the spraying, the glyphosate product must be one that has a different type of wetting agent that won’t impact upon frogs (such as ‘Roundup Biactive®’). These products are informally known as “frog-friendly”. It is now illegal to use the non-frog-friendly products in or around water.

Glyphosate is called a non-selective translocating herbicide. Basically, this means that it affects all plants (both broadleaves and grasses) and once absorbed, will be transported throughout the plant by its vascular system.

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 basically non-toxic to animals. It is practically non-toxic to fish, aquatic invertebrates, birds and bees; and has low toxicity to earth worms. However, the wetting agent in non-frog friendly products can affect the skin of some tadpoles and frogs.

It has a low toxicity to humans – about the same poison rating as table salt. Contact with the skin can cause skin rashes, especially to people with sensitive skin.
How to best use glyphosate against cat’s claw creeper

Glyphosate can be used effectively to treat cat’s claw creeper as a foliar spray, and using the cut and paint or the scrape and paint techniques.

**Foliar spraying**
Spraying the leaves of cat’s claw creeper with glyphosate is most effective when the plant is growing across the ground – especially if the leaves are in their large roundish form.

It seems that at this stage of their growth, you will be able to get enough herbicide into their system to be able to have a reasonable effect on the underground tubers.

Although glyphosate is a translocating herbicide, it isn’t very good at being transported through a tuber system if it is sprayed onto the leaves. Somehow, it seems that the plant can stop the glyphosate from getting into all its parts.

So if you have little leaf area to spray, it is likely that the underground tuber will survive and you’ll get resprouting and regrowth.

The mixing rate for foliar spraying is 10ml of a 360g/L glyphosate 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, Synertrol 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.

The major problem with using glyphosate is that it is non-selective and will kill grasses and other non-target plants that are sprayed – so take a great deal of care.

Take care around waterways. Don’t allow the spray mixture to contaminate water. If possible spray from the water edge back towards the land. Take care in areas where frogs are known to exist in the ground cover. The built-in wetting agents in non-frog friendly glyphosate herbicides (and any wetting agents used) may damage the delicate skin of frogs.

**Cut and paint**
Generally – don’t bother to cut and paint cat’s claw vine unless the vine is thicker than a pencil. The problem is that the small cut surface won’t be able to absorb enough of the painted-on herbicide to affect the whole of the tuber. It is better to use either the scrape and paint or the cut and dip techniques. Or an effective technique is to cut these vines without treating them, and let the tuber resprout. When enough new growth is on the ground, foliar spray the leaves.

For anything over pencil thickness, use a mixture of 83ml of glyphosate 360g/L herbicide per 1 litre of water. Cut the stem and paint/spray the solution on within 15 seconds. Any longer than this and the technique may not be effective. Also, the
closer to the ground you can cut, the better – but not so close that the cut surface could be contaminated with dirt – which could render the herbicide ineffective.

**Scrape and paint**
This technique involves scraping 10-20cm of the bark layer of the stem to expose the sap and water vessels underneath, and then applying the herbicide to the scraped section within 15 seconds.

By leaving the vine actively growing, the herbicide will be taken into the plant and transported through the roots, stems and leaves more effectively than if the stem were cut and the herbicide applied to the cut surface.

It is easiest to use a knife to scrape the stems, and then a paint brush or foam topped shoe polish bottle to apply the herbicide.

More than one scrape may be needed on larger stems. This may be done on either side of the stem. Make sure that in scraping the stem it isn’t ringbarked, as this will reduce the likelihood of the technique working.

The mixing rate is 83ml of glyphosate 360g/L herbicide per 1 litre of water.

**Cut and dip**
This is an improvement on the cut and paint technique. The vines are cut and – within 15 seconds – dipped into the glyphosate mixture. They are held under for about 15 seconds. It is only necessary to dip the ends of the vines that go down into the ground. A cut off plastic drink bottle is perfect for this. Use the same mixture rate as for cut and paint.

An improvement on this is to cut the stem and leave them in the herbicide solution overnight to suck up the chemical. This technique maximises the amount of herbicide that gets into the plants system. You can again use the cut off drink bottle, or poke the stems into a hole punched in the lid of a film canister. This approach will stop dirt or rain from getting into the herbicide mixture. But remember – the cut ends must be immersed within 15 seconds.

**How to tell if it’s working**
If you are using the cut and paint or cut and dip technique, you will see some drastic and rapid results, as the top of the vine withers and dies. Results from foliar spraying and scrape and paint 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 or scrape and painted, it is important 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 glyphosate effects on regrowth are that the growth will be misshapen, leaves will look stunted and they may have a yellowish-green look.

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

Follow up
Don’t expect glyphosate 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 and equipment. Store it appropriately and securely.