



RESPONSIBLE CHEMICAL USE



The key to success is accurate application of spray mix to all the actively growing foliage

Learning how to manage and handle chemicals safely and responsibly not only ensures your personal protection, but also provides environmental protection for our precious natural resources, like water, soils, native plants and animals, marine and coastal environments.

This fact sheet is part of a series designed to help you:

- increase your awareness of correct and responsible use of all chemical types
- gain the knowledge required to effectively control weeds, pest insects and diseases without damaging, contaminating or polluting our environment
- adopt best practice to minimise chemical use and maximise personal safety, and
- play a part in improving water quality and environmental health.

When is the Right Time to Spray?

Deciding when to spray is an important question and the answer depends on a number of factors. These include weather conditions and the stage of growth of the target pest or plant.

However, the first decision is whether or not to spray. Do you need to do anything at all, or will nature deal with it. There may be beneficial insects or diseases that will attack and control the pests for you. Maybe there is a safer way than using a chemical. Chopping the weeds out of a path or garden, then covering the area with mulch, may offer a cost-effective alternative solution.

For more information on alternative pest control options, please refer to another fact sheet in this series: Alternatives to Chemicals.

Pest Control Options

For someone with young Salvation Jane or Capeweed in a garden, the right option might be to hoe or hand-pull the weeds. For the same weeds in a pasture, spraying may well be the best option.

The best time to spray most annual weeds is when they are young and actively growing. This is when they are most susceptible to recommended chemicals and when you need least herbicide to get maximum effect.

However, bulbs like Soursob (Oxalis) need to be sprayed when they are in flower to achieve the best result.

For good control of woody weeds, like Blackberry and Gorse, you need plenty of fresh, actively growing vegetation. Therefore the right time to spray might be late summer or early autumn after you remove dead material and can then allow time for plenty of regrowth to absorb chemical.

Labels on chemical containers are an essential source of information on when and how to use each chemical. It is important to pay close attention to label information and to exactly follow instructions on timing, rates and safety issues.

There are many factors to take into account when deciding when to spray, including weather (wind, moisture and temperature), soil, growth stage and leaf area. Let's look at some of those factors in detail.

Weather

It should not be too windy, so the spray doesn't drift off target. In many situations the right time to spray will be when there is a breeze blowing away from sensitive crops, a neighbour's property, a waterway or your house.

Do not apply chemical before rain is forecast. The chemical will be washed off the plant, the weeds won't be affected (a waste of money) and worse still, the chemical will end up in a local creek or river putting the environment at risk.

It should also not be too hot, because heat stress will reduce a plant's capacity to absorb herbicide.

Other fact sheets in this series

- Accuracy and Effectiveness
- Alternatives to Chemicals
- Bait Station Safety
- Calibrating Spray Equipment
- Personal Safety
- Understanding Product Labels #1
- Understanding Product Labels #2
- Using Glyphosate
- Weeds Near Water





Soil

The soil in which weeds are growing needs to be moist, but not wet, to avoid stress from waterlogging or dry conditions. Damp soil also minimises the chance of dusty weeds which you want to avoid, because dust on weeds will reduce the effectiveness of most sprays.

Leaf Area

The leaf area to be sprayed needs to be large enough to absorb sufficient chemical for it to be effective. Leaf area is a particularly important factor when attempting to control perennials like Blackberry or Gorse.

In such situations it can make good sense to reduce the amount of dead vegetation before spraying, for example by slashing. It is important to allow the plant to regrow before spraying again.

For instance, in the case of Blackberry, young green canes should be one to two metres in length. The key to success is accurate application of spray to all the actively growing vegetation.

In case of annual weeds, including Salvation Jane and Capeweed, spray when the rosettes are approximately 15cm in diameter.

Other Considerations

It is important to discuss your plans to spray with your neighbours so that you can identify when and how spraying can be done with minimal risk or inconvenience to them and their property. It is far better to talk first rather than argue afterwards.

The same applies within a household. The best time to spray is after everyone knows what is planned and the area to be sprayed has been "secured" by removing children, pets, toys, pot-plants and so on.

In bedrooms, the best time to spray for mosquitoes is in the morning after everyone is up, not just before going to bed.

If at all unsure about spraying safely and efficiently, perhaps using a licensed spray contractor or pest control operator may be a better option.



Discuss your spraying plans with neighbours

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When using chemicals more is not better!

If you are uncertain about any aspect of chemical use, please seek professional advice from the place of purchase or the manufacturer before proceeding.

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