

WEED PROBLEMS

Topics covered in this section

- Weed types
- Weedkiller properties
- Weed Control in various situations

Additional reference: The "Garden Expert" has a section on weed types and weed control

Why control weeds?

Left uncontrolled weeds will spoil the appearance of a garden and deprive cultivated plants of water, space, light and nutrients. Sometimes weeds can grow so vigorously that they choke out carefully nurtured plants. They can also harbour pests and diseases and can multiply very quickly either vegetatively by roots and shoots or through the production of seeds, often in large numbers.



ROCKERY OVERGROWN WITH WEEDS



SELECTIVE WEED CONTROL IN A LAWN

Weed types

Annual weeds

These complete their life cycle within a year. Some weeds such as Annual Meadow-Grass can produce more than one generation of 'offspring' per year and complete their life cycle in as little as six weeks!

All parts of annual weeds die at the end of flowering and seed production, including the roots. These roots are usually relatively shallow and fibrous, making them easy to pull up. The large number of seeds that weeds can produce may result in problems in subsequent years. Even those seeds which do not germinate in the following year can remain

viable in the soil for many years to come, and will germinate when cultivation exposes them to light and air. To avoid increasing the problem, annual weeds should be eradicated before they produce flowers and set seed.

Examples of annual weeds: Red Dead Nettle, Chickweed, Groundsel, Cleavers, Hairy Bitter-cress, Fat Hen, Redshank, Speedwell, Annual Meadow-Grass.

Biennial weeds

Biennial weeds have a two year life cycle. Foliage growth often in a "rosette" form takes place in the first season with flower and seed development occurring in the second year.

Examples of biennial weeds: Spear Thistle, Cow Parsley, Wild Garlic, Ragwort.



FAT HEN

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DANDELIONS

Perennial weeds

Perennial weeds can live for several years; at the end of the growing season the leaves die back, but the roots and underground parts survive the winter and the foliage re-emerges the following spring.

These weeds either have deep tap roots or extensive root systems and unless every part of the root system is removed or killed, the weeds will grow again. They can also regenerate from stem tissue and many set seed, as well. It is important to control these weeds before they become well established as they are more difficult to control once established.

Examples of perennial weeds: Ground Elder, Couch Grass, Bindweed, Docks, Oxalis, Horsetail, Dandelions.

Weedkillers - properties

Weedkillers have different properties which affect how they work, how long they last and the types of weeds they control.

The main modes of action are:

Contact: A contact weedkiller will kill green parts of the weeds or plants to which it is directly applied. It will not be transported to other parts of the plant. It is thus suited to the control of annual weeds, but less so to the control of perennial weeds, as the roots are not killed. Regular use on perennial weeds will, however, weaken their growth over a period of time.

Systemic: Systemic or translocated weedkillers are absorbed by plants and carried around the whole plant, including the roots. They are suitable for the control of both annual and perennial weeds but they do rely upon weeds being in active growth. They will thus be less effective and slow-acting if they are applied in periods of slow growth such as cold or drought.

In drought conditions, weeds often look healthier than cultivated plants, so users are likely to want to use weedkillers in these conditions. To get the best weed control from a systemic weed killer in dry weather it is advisable to water the weeds to get them into more active growth before treating them. Systemic weed killers based on glyphosate need between 4-6 hours without rainfall in order to be absorbed properly by weeds. If it rains in the interim, it may be necessary to give a further application. It is also a good idea to know what to expect in terms of weed control - systemic weed killers take longer to show the effects of control than contact weed killers and users often don't realise this, so they may think the weedkiller isn't working.

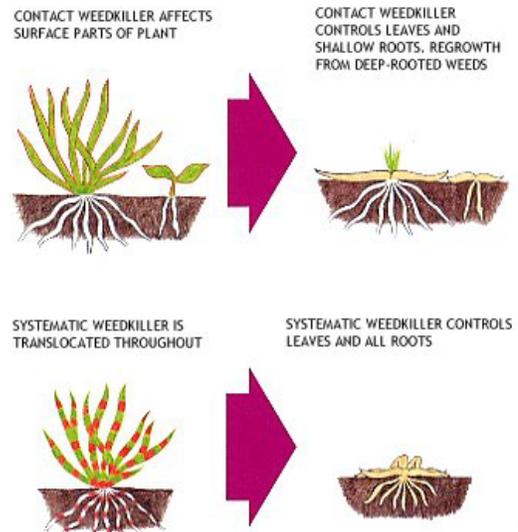
Selective: Some weedkillers contain active ingredients which will selectively control weeds with a certain type of growth habit without harming plants with a different growth habit. Lawn weedkillers will selectively control broad leaved weeds without damaging the grass. Selective weedkillers may be either contact or systemic in their mode of action. Most weed killers currently available are non-selective - ie they will cause damage to cultivated plants, as well as weeds, so care must be taken when the weedkillers are being applied.

Non-residual: Non-residual weedkillers have little or no persistence in the soil and are therefore suitable for use where land is required for planting soon after application.

Residual: A residual weed killer remains active in the soil for several months or longer, depending on the product and climatic factors. While it continues to be active weed growth is prevented. Most residual weedkillers are used primarily in Combination Products (see later) for long term total weed control. These products should not be used near established plants or if the treated area is required for planting purposes in the short to medium term (check product label). Sodium chlorate is both a residual and contact acting herbicide but should not be used close to grass or planted areas as the chemical is inclined to creep sideways.

There are residual weedkillers which can be used prior to planting and/or around growing plants. They are generally suitable for use around shrubs and woody plants and can be very useful for customers wishing to have a low maintenance garden or area, provided they are happy to grow only woody plants such as shrubs or roses.

Combination Products: Several active ingredients with different modes of action are formulated together into one product. For instance a contact acting ingredient will control existing growth while a residual ingredient in the same product kills any germinating seedlings for several months. Examples are the path weedkillers.



Weed control in different situations

Before selecting a weedkiller, it is important to assess which product would be the most suited to the situation.

Key factors to consider are:

- Where the weeds are growing (e.g. paths, drives, borders etc.)
- Types of weed present
- Whether land is required for growing purposes afterwards
- Time of year/growing conditions

Here are some examples of various weed control situations and the type of weedkiller that should be used:

Clearing areas prior to planting

Where land is required for planting soon after the weeds have been cleared, e.g. before a lawn is seeded or turfed or where vegetables or ornamentals are to be grown, ensure that the weed killer has no residual action. Where mainly annual weeds are present, either a contact or a systemic weedkiller may be used. Contact weedkillers are quicker acting, but will not give thorough control of deep-rooted perennials. Thus if a lot of deep-rooted woody or perennial weeds are present the best bet would be a non-residual systemic weed killer.

Weed control amongst cultivated plants

Roses and shrub borders: As previously covered, some residual weedkillers are suitable for use among woody plants, such as roses and shrubs - see product labels for full details and restrictions.

Mixed borders and vegetables: Depending upon how closely weeds are growing to cultivated plants, a ready to use spray or carefully applied diluted concentrate of a systemic, non-residual weed killer is often the best option for weed control in planted borders. If plants are growing in very close proximity to weeds it may be necessary to treat some of the weeds with a spot treatment, such as a pencil or gel. To control weeds growing in between rows of vegetables, either a contact or systemic non-residual weedkiller may be used, depending upon the types of weed present. To aid accurate application it is best to use a dribble bar attachment where weed killers are applied with a watering can.

Problem weeds

Some weeds, such as bindweed, horsetail, stinging nettles and brambles are very difficult to eradicate. A brushwood killer or systemic weed killer would need to be used to control problem weeds effectively. Even then, more than one application may be needed. Timing of treatment may be critical for some weeds - these details will be on the product label, so check thoroughly. Another point to bear in mind is that certain brushwood killers have a slight residual action - again, double check with the label.

Long term weed control

To keep an unplanted area clean and tidy, a residual weed killer may be the best option.

Paths, drives and patios

Whilst many weed killers may be used on paths and drives, the advantage of using a proprietary path weedkiller is that not only will the weeds present be controlled, emergence of new weeds is also prevented, normally for a few months. Users should be aware that heavy rain after application may result in run-off onto untreated areas resulting in possible damage to cultivated plants.

NOTES

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Product benefits

Benefits of various weedkiller products may include the following:

- Controls existing weeds and prevents new ones emerging for a season or longer (e.g. path weedkillers)
- Controls perennial/difficult weeds
- Gives quick results
- Rainfast within short period of time (i.e. will still work even if rain falls shortly after treatment)
- Non-residual (i.e. can plant or sow soon after application)
- Selective control of weeds
- Works even when cold/dry
- Keep areas round shrubs weed free
- Suitable for treating tree stumps to prevent regrowth

NOTES

ALWAYS READ THE LABEL. USE PESTICIDES SAFELY