

Guide to Weed Killer Types

When it comes to weed killers, it's important to select the right one for the job at hand. But what's the difference between systemic, residual, organic, total, contact, and selective? And which one is right for you?

If you've found yourself scratching your head about what type of weed killer does what, you're not alone.

There is a lot of terminology around weed killers (also known as herbicides), and it can be confusing to understand, especially when many of the category terms can be applied to a single product.

We've broken things down with our easy guide to weed killer types - so you'll always buy the right product to suit your weed problem.





CONTACT WEED KILLERS

- Contact weed killers kill the part of the plant they come into contact with. They are fast-acting, so when conditions are right, results can be seen in a few hours.
- Contact weed killers are usually applied during the growing season in the mornings to ensure the active ingredient is taken up when the leaf stomata are open.
- Contact weed killers do not impact the garden soil surrounding target plants because the active ingredient is unavailable to the plant roots. Instead, it remains locked in the soil particles so is effectively redundant in the soil.
- Contact weed killers are post-emergent as they are only used on weeds that have fully germinated. They can be selective or non-selective.

Area of use

- Use for the quick treatment of smaller annual weeds like bittercress, chickweed, cleavers, herb robert, fat hen, groundsel, and creeping wood sorrel.
- However, whilst effective against these small annual weeds, perennials with deep tap roots will usually regrow and require retreatment.
- Contact weed killers will kill most vegetation so should be carefully target-applied if using in areas where other plants are to be kept.

Active ingredients can include

- Pelargonic acid
- Carfentrazone-ethyl

Example products

- SHARK
- FINALSAN





SYSTEMIC WEED KILLERS

- Systemic weed killers work their way through the entire plant to the plant roots. You might also see this process explained as translocation, or translocation through the vascular system.
- Eventually, systemic weed killers will kill the entire plant.
- Most weed killers fall into this category, and they can be total or selective.
- Following application of a systemic weedkiller, it can take from one to four weeks for the plant to die depending on the weather and the type of weed. In this respect, they are slower than contact weedkillers.
- Systemic weed killers can be applied at various stages of weed growth.
- Available in granular or liquid and ready-to-use formulations.

Area of use

- Use to eliminate deep-rooted weeds like dandelion, dock, bracken, bindweed and nettles from hard surfaces, cracks in paving and on gravel.
- They are also used to treat weeds in flower beds or planted areas where a selective systemic herbicide is used, or where the application of a total systemic herbicide can be accurately target-applied to just the weed.
- Some formulations are suited to tougher perennial weeds.

Active ingredients can include

- Glyphosate
- Cycloxydim

Example products

- GALLUP BIOGRADE
- LASER

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- Selective weed killers target some plants while leaving non-target plants unharmed.
- You might choose a selective weed killer to kill weeds that appear in a lawn because they will not harm the surrounding grass.
- Selective phenoxy herbicides (such as Depitox and Agritox) are absorbed through the plant's foliage where they go on to interfere with cell formulation resulting in abnormal root and shoot growth.
- Ultimately this abnormal growth will kill the weed plant.
- Other systemic selective herbicides are translocated around the vascular system and kill the plant by inhibiting certain chemical pathways in the plant.

Area of use

• Use to eliminate lawn or grassland weeds where the grass must remain unharmed. Weeds might include dandelion, buttercup, clover and daisy.

Active ingredients can include

- Fluroxypyr
- Clopyralid
- Dicamba

Example products

- PRAXYS
- GRAZON SPOT
- DICOPHAR



RESIDUAL WEED KILLERS

- Residual weed killers are longer lasting than other herbicides.
- They work by creating a chemical barrier in the soil that will kill off weeds as they germinate.
- Residual weed killers work well on porous surfaces such as paths and driveways – often keeping weeds at bay for 5 months.
- They can be used with other herbicides to treat actively growing weeds and prevent further germination of non-emerged weed seeds.
- Because they prevent the germination of weed seeds, residual weed killers are often referred to as pre-emergent herbicides.

Area of use

 Use to control a range of annual grasses and broad-leaved weeds in ornamental plant and tree plantations, and on surfaces where you will not be planting or replanting.

Active ingredients can include

- Propyzamide
- Isoxaben
- Flazasulfuron
- Napropamide

Example products

- CHIKARA
- PROPYZ
- GEM GRANULES
- FLEXIDOR



TOTAL, NON-SELECTIVE, OR BROAD-SPECTRUM WEED KILLERS

- Total weed killers are non-selective and will eliminate any vegetation they come into contact with.
- They are mostly used on hard surfaces, or in areas where the aim is to clear all vegetation.
- Total weed killers should be applied on a calm day with no wind as the drift can affect neighbouring plants.
- Total weed killers can be either be contact or systemic.

Area of use

• Use to clear the ground of all weeds and plants. This might be on a hard surface, or in an area being prepared for crop production.

Active ingredients can include

- Glyphosate (systemic)
- Pelargonic acid (contact)

Example products

- ROUNDUP
- GALLUP BIOGRADE
- DIAMOND



AQUATIC

- Aquatic weed killers are formulated for use in or around water, including ponds and lakes.
- Aquatic weed killers must have aquatic approval and should be applied in a targeted way to reduce contamination risk.
- You will also need approval from your local Environment Agency before using products in open waters such as rivers.

Area of use

- Use to control weeds in waterside planted areas.
- Inhibiting pond weeds.

Active ingredients can include

- Glyphosate
- Biocar 405A (adjuvant)

Example products

- ROUNDUP PRO VANTAGE
- ROUNDUP PRO ACTIVE
- TOP FILM (ADJUVANT)





- Pre-emergent weed killers are residual herbicides.
- They have no effect on weed seeds that have already germinated but can kill non-germinated weed seeds.
- Pre-emergent weed killers work well in spring months just before germination to last through the main growing season.
- Pre-emergent weed killers should not be used on newly sown lawns.

POST-EMERGENT WEED KILLERS

• Post-emergent is the term applied to a variety of different weed killers to describe the fact that they are only effective on weeds that have already germinated and are in leaf.

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Helping you make the right choice

Always use plant protection products safely and read the label and product information before use. Anyone using pesticides professionally must have received adequate training and be skilled in the job they are carrying out.

If you have any questions about weed killers or have a situation not described here, please get in touch with our technical team for free advice.

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