

NEW SERIES

Problem weeds include horsetail (main image), ground elder (right) and hedge bindweed (below right).

To apply systemic weedkiller without affecting nearby plants, you can spray through the top of a bottle (bottom right).

Garden solutions

The worst of weeds

Perennial weeds can quickly dominate a garden unless you take action. Use cultural or chemical methods to remove these invaders for the long term >>

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Perennial weeds are a perpetual problem in our gardens, disrupting borders and overpowering other plants. Unlike annuals, they are difficult to remove, becoming dormant over winter and smugly reappearing in spring. Some of these weeds were once valued for their edible and medicinal properties: ground elder was used to relieve gout, lesser celandine to ease sore throats, and horsetail was used to treat kidney problems. Now, however, they only serve to cause gardeners grief.

Below the surface

The biggest problem lies underground, where thuggish roots can penetrate deep into the soil. In his book, *Weeds*, Richard Mabey recalls a quarry in Kent where 'a worker found ground elder roots probing 9m (30ft) below the surface'. Thankfully this is an extraordinary example.

Unearthing these unwelcome guests can often exacerbate the problem. Many perennial weeds can regrow from the smallest fragment of root or rhizome left in the ground. Weedkillers offer the quickest method for removal; glyphosate-based herbicides will kill a weed, systematically, down to the roots in around three weeks. Care needs to be taken to avoid damaging – and potentially killing – adjacent plants.

Non-chemical methods take time and patience. Digging up or hand-weeding is possible, but it is important to be vigilant and keep on top of any new growth that appears. A combination of cultural and chemical methods may be the most effective way to manage growth, resorting to chemical control if the invasion of perennial weeds is causing, not curing, headaches. ●

How to deal with five problem weeds



Couch grass *Elymus repens*

A deceptive weed that looks like a tuft of any grass. However, underground, a dense army of creeping rhizomes quickly spreads, entangling themselves around the roots of other plants. This can make eradication difficult.

Life cycle

New plants grow from spring to autumn; stems (culms) can grow 30-120cm (1-4ft) high. Couch grass is self-fertile but rarely produces seed, relying on its wiry root system to spread around the garden.

Control

Cultural: shallow roots mean it is possible to fork out and hand-weed in lighter soils. It is all too easy, however, to leave small pieces of rhizome in the ground.

Chemical: if treating in spring, spray with glyphosate weedkiller when growth is 10-15cm (4-6in) tall. To protect other plants, cut the bottom off a plastic bottle, place over weeds and spray through the top of the bottle.



Lesser celandine *Ficaria verna*

Creating a carpet of heart-shaped leaves, this British native grows from root tubers and spreads via tubercles (bulbils) that form in the leaf axils. The flowers provide early spring interest, but the persistent tubers can make it a nuisance.

Appearing in late February, lesser celandine reaches no more than 5cm (2in) in height but has a much wider spread. The plant has a short season, dying back in an unsightly fashion from late April.

Cultural: digging up the plant can result in spreading more tubercles. Mulching affected areas with 10cm (4in) of organic matter can suppress the weed, but is not guaranteed.

Chemical: for best results, dig up garden plants when they are dormant (winter), and in spring treat the entire area with a systemic weedkiller.



Field horsetail *Equisetum arvense*

With upright, slender, fir tree-like foliage, horsetail is deep rooted and fast growing. The creeping rhizomes can go down as deep as 2m (6½ft), making them near impossible to dig out of the ground.

In spring, light brown stems appear with cone-like, spore-producing receptacles (sporangiums) at the end of stems. The fine leaves develop in summer, growing up to 60cm (2ft) tall.

Cultural: occasional weeding may make the problem worse. Shallow rhizomes can be forked out; deeper roots need considerable excavation. Removing shoots as they appear can reduce an infestation over a number of years.

Chemical: use systemic weedkiller (pictured, below right) in late summer. Bruise foliage with a rake to improve weedkiller absorption before applying.



Hedge bindweed *Calystegia sepium*

Its silky white trumpet flowers do little to redeem the thuggish qualities of bindweed. Strong, scrambling stems smother innocent victims. Hedge bindweed rarely produces seed; when it does, seeds can remain dormant in the soil for years before germinating.

Grows rapidly from spring to autumn. Rhizomes can penetrate at least 5m (16ft) deep and the outward spreading roots can extend 2m (6½ft) or more in one season.

Cultural: continuously digging out new growth can keep on top of the weed. Inserting solid barriers 45cm (18in) deep into the soil can help stop roots spreading.

Chemical: in spring insert bamboo canes (pictured, below) and allow it to climb up them. You can then accurately apply gel formulation weedkillers, or lay the vines across bare soil and spray with a glyphosate-based weedkiller.



Ground elder *Aegopodium podagraria*

Lobed leaves create a carpet of foliage, which can quickly spread to gardens from neighbouring plots while suppressing plants that are not as vigorous. In early summer 1m (39in) tall stems produce several heads of lacy white umbels.

New leaves appear in spring and summer, reaching up to 30cm (12in) in height. Usually spreads via rhizomes, but it also produces viable seed.

Cultural: lift cultivated plants and tease out any ground elder rhizomes. Cover the affected area with black polythene to starve remaining weeds of light - this may take several seasons.

Chemical: midsummer is the best time to apply systemic weedkiller; reapply later in the season if needed. With all weeds, more of the chemical will be absorbed if sprayed in the evening.



Covering weeds to block light is an effective way to suppress their growth.

RHS Science: systemic weedkillers

Systemic weedkillers are non-selective and should be carefully applied. They contain the active ingredient glyphosate which, after being applied to the leaves, is absorbed into the sap stream and travels around the plant, including down to the roots. The chemical prevents the plant from creating certain enzymes needed for growth, killing it above and below ground.

Mid- to late summer is the best time to apply, when the plant has the largest surface

area. However, you will need to re-treat plants if it rains within six hours of application.

✦ Products include: Scotts Roundup, Doff Glyphosate Weedkiller, Bayer Garden Rootkill Weedkiller and Resolva Xtra Tough.

Additional ingredients

It takes time to see visible results from systemic weedkillers: plants can take at least three weeks to die completely. Many manufacturers therefore also add either

diquat, fatty acids or acetic acid - used in contact weedkillers - so that changes can be seen in 24 hours. It may be tempting to dig up weeds as soon as they start to wilt, but the chemicals need time to reach the roots - especially as perennial weeds can regrow from the smallest section of living root left in the soil.

✦ Before applying weedkillers, always read the dosing, application and health-and-safety instructions on the packaging.



MORE ADVICE FROM www.rhs.org.uk

- ✦ For further information on non-chemical weed control search 'Weeds cultural control'.
- ✦ Search 'Broad-scale weedkillers' for details on applying spot and broad-scale weedkillers.
- ✦ Search 'Chemical sprayer' for tips on applying controls.

