

# NON-TOXIC WEED CONTROL

Weeds are not just unsightly—they siphon moisture and nutrients away from the plants you want to grow. Fortunately, with a little knowledge, a few simple strategies, and one or two handy aids, you can keep weeds from taking over your garden. And you never need to use harsh chemical herbicides that could harm people, pets, and wildlife.

## Mulch Always

Bare soil is an invitation to weeds. Keep the ground around your plants covered at all times with mulch and it will block sunlight from reaching weed seeds, so they don't start coming up. In vegetable beds, straw, shredded leaves, pine needles, and grass clippings are effective mulches and they nourish the soil as they break down. Spread a 3-inch layer of these materials on your garden in spring and replenish as needed throughout the growing season. Shredded hardwood or pine bark nuggets work well in ornamental beds and around trees and shrubs, where you don't often dig. Those materials are slow to decompose, so you may need to replenish them no more than once a season.

## Plant Densely

There isn't a lot of room for weeds to creep into a tightly planted garden, because the sunlight won't hit any weed seedlings that come up. Where you have bare areas or newer gardens, consider sowing seed of California poppy (*Eschscholzia californica*), love-in-a-mist (*Nigella damascena*), or Queen Anne's lace (*Daucus carota* 'Dara') while you wait for the permanent plants to grow in and fill the spaces. Self-sowing annuals like these are great because they are easy to edit out when you don't want them anymore.

## Hand Work

The best time to pull weeds is when they're young, before they have a chance to put down deep roots. Grasp them below the spot where the leaves meet the roots and try to get the whole root—some weeds resprout if you leave a little piece of root behind. If the soil is very dry, moisten before pulling to loosen the roots' grip.

## Hoe Choices

There are lots of tools marketed for removing weeds, but the simple ones tend to work best. Use tools with long-shafts and forked heads—such as dandelion diggers—to lever out weeds with long taproots. In beds full of weeds with shallow roots, pulling the sharp edges of a stirrup or hula hoe below the surface of the soil cuts off weeds and eliminates their ability to gather sunlight.

## Corn-gluten Meal

A by-product of corn processing, corn-gluten meal is safe enough to eat but it contains compounds that naturally suppress seeds from sprouting. It comes in a granular form that can be spread on garden beds and lawns in spring or fall. Corn-gluten meal works on all types of seeds, so you don't want to use it where you've just sown new flowers, vegetables, or grass. You can find bags of corn-gluten meal in garden centers and feed stores, and online.

## Sun Solution

If you have a large area where you want to clear weeds and a little time to do it, you can let the sun cook them. Just soak the soil and cover it with a sheet of clear plastic, its edges weighed down with large stones or bricks. The sun will heat up the plastic and burn out the weeds. This works best during the long days of summer sunlight.





## Safe Sprays

Citrus or clove oil sprays eliminate weeds sprouting in pathways, patios, and other tight spots, but don't harm other living things. Coat the leaves with the spray on a sunny day, and in a few hours the plants will have turned brown and wilted. If they aren't fully dead the next day, spray again. You can find these non-toxic weed controls in nurseries or online. You can also make your own with a few drops of the essential oils (*found in natural foods stores*) in water.

## Read Your Weeds

The types of weeds you see coming up in your garden are an indicator of the soil's conditions. Here are 10 common varieties and what you can learn from them.

**Bindweed** (*Convolvulus arvensis*) grows in crusty or compacted soil.

**Chickweed** (*Stellaria media*) is common in alkaline (high pH), compacted soil.

**Crabgrass** (*Digitaria spp.*) comes up in nutrient-poor soil.

**Dandelions** (*Taraxacum officinale*) indicate the soil is low in calcium, an essential mineral.

**Dock** (*Rumex spp.*) and goldenrod (*Solidago spp.*) thrive in wet, poorly drained soil.

**Knotweed** (*Polygonum spp.*) takes root where the ground is compacted.

**Mullein** (*Verbascum thapsus*) shows up in acidic (*low pH*) soil with low fertility.

**Plantain** (*Plantago spp.*) favors heavy clay and soggy conditions.

**Ragweed** (*Ambrosia spp.*) tends to grow in soil with low fertility.

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