

# Weed Control Using Herbicides

Most weed problems in gardens can be managed by hand weeding, mulching, good garden design, keeping lawns vigorous and competitive, or using other nonchemical methods. However, gardeners sometimes choose to use an herbicide (a chemical weed killer) to control weeds.

When using herbicides, follow label directions precisely. Otherwise products will fail to control the weeds, and they might damage desirable plants, limit your ability to replant within a preferred time frame, or waste herbicide if it gets carried away in runoff water. Follow up herbicide treatments with longer-term, nonchemical methods such as installing mulches, modifying irrigation methods, pulling weeds, or filling cracks.

## Select the proper herbicide by identifying the weed and application site.

- ◆ Be sure the label lists the weed you want to control.
- ◆ An herbicide will kill all susceptible plants, not just weeds. Make sure the label says it's safe to use on or around the plants in your lawn, garden, or landscape.
- ◆ Be sure the weeds are in a stage that is susceptible to the herbicide. (See preemergent and postemergent below.)

## Check the label for the herbicide type.

- ◆ Herbicides that kill most plants they contact are called *nonselective*.
- ◆ Weed killers that control some kinds of plants but not others are called *selective* herbicides.
- ◆ Herbicides that control the germinating seeds before plants emerge from the soil are called *preemergent* herbicides. They won't control weeds that have already emerged. Use *postemergent* herbicides to control plants that have already emerged.
- ◆ The younger the weed, the better a postemergent herbicide will work.



Dandelion (left) is a broadleaf weed while crabgrass (right) is a grass weed. Some herbicides are selective—they control only broadleaf plants or only grasses.



Some Common Active Ingredients in Herbicides and Their Use

Active Ingredient <sup>1</sup>	Weeds Controlled	Where Used	Notes
<b>Glyphosate:</b> Nonselective, postemergent	Most	As spot treatments on weeds or clumps of weeds	Will injure desired plants if spray gets on them.
<b>Plant oils</b> including clove, lemongrass, and eugenol: Nonselective, postemergent	Young broadleaves	In cracks and crevices or as spot treatments	Organically acceptable. Won't control older weeds or perennials. Best when temperatures are higher than 70°F.
<b>Trifluralin:</b> Selective, preemergent	Most annual weeds	Gardens and lawns	Water or cultivate soil after applying. Use after garden plants are established.
<b>Benflin:</b> Selective, preemergent	Most annual weeds	Lawns	Often used for crabgrass control.
<b>Dithiopyr:</b> Selective, preemergent	Crabgrass, annual bluegrass, oxalis, spurge, and others	Lawns	Will injure fine fescue and bentgrass.
<b>Dicamba:</b> Selective, postemergent	Broadleaves	Lawns	Controls clover and other broadleaf weeds in lawns.
<b>Fluazifop:</b> Selective, postemergent	Grasses including bermudagrass	In broadleaf groundcovers or landscape beds	Apply when grass weeds are actively growing.
<b>2,4-D or 2,4-Dichloroacetic acid:</b> Selective, postemergent	Broadleaves	Lawns	Controls dandelion and other broadleaf weeds in lawns.

<sup>1</sup> Some of these active ingredients are sold in combination with other ingredients.

Visit the UC IPM Web site at [www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu) for more details about weed management and identification.

Minimize the use of pesticides that pollute our waterways. Use nonchemical alternatives or less toxic pesticide products whenever possible. Read product labels carefully and follow instructions on proper use, storage, and disposal.

For more information about managing pests, contact your **University of California Cooperative Extension office** listed under the county government pages of your phone book or visit the UC IPM Web site at [www.ipm.ucdavis.edu](http://www.ipm.ucdavis.edu).

**What you use in your landscape affects our rivers and oceans!**

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