

# Weed Control in Lawns and Other Turf

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Weeds are plants out of place. A plant may be desirable in one situation and a weed in another. For example, creeping bentgrass plants can invade a Kentucky bluegrass lawn and cause unsightly patches. On a golf green, however, creeping bentgrass is highly desirable as the predominant plant. Weeds detract from the beauty of lawns due to the contrast in color and texture between the desired grass plants and the weeds. In addition, weeds compete with the desired grass plants for available water and nutrients, usually resulting in thinning of desirable plant cover.

## Weed Identification and Characteristics

Lawn weeds may conveniently be divided into two classes based on the way in which they emerge from the seed. Monocots emerge with a single seed leaf whereas dicots emerge with two seed leaves. Most monocot weeds found in turfgrass are from the family Gramineae and are termed **weedy grasses**. Examples include crabgrass, annual bluegrass, tall fescue, and quackgrass. Dicots, on the other hand, are termed **broadleaf weeds** and include such plants as dandelion, clover, ground ivy, knotweed, and plantain.

Weedy grasses and broadleaf weeds are further divided into groups according to the plants' length of life. **Perennial weeds** have a life of more than two years, though new seeds may be produced every year. **Biennial weeds** have a life of two years, generally storing up food reserves in the leaves and roots the first year and producing seed in the second year. The biennial weeds often are grouped with perennial weeds since control is similar. **Annual weeds** germinate from seed, grow, flower, and produce seed in less than one year. **Summer annuals** germinate in the spring and mature in the fall, whereas **winter annuals** germinate in fall or late winter and mature in late spring.

Effective control of weeds in turf is based on correct identification. Many books and charts are available to help in identifying common lawn weeds. For additional help in weed identification, inquire at your county extension service.

## Methods of Control—Cultural

The most effective method of controlling lawn weeds is to maintain a dense and vigorously growing turf cover. Weeds are often an indication of problems in the grass plant environment, and killing the weeds without correcting the underlying problem will lead to unsatisfactory results. For example, a problem with knotweed is usually an indication of severe soil

compaction. Control of knotweed without correction of the soil compaction will only lead to sparse soil cover until the area is again invaded by weeds that grow in compacted soil.

Often turf weeds can be controlled simply by altering the cultural practices to favor the grass plants rather than the weeds. The cultural controls may include raising (or lowering) the mowing height, changing the frequency of mowing, lengthening (or shortening) the period between irrigations, increasing (or decreasing) the application of fertilizer, or aerifying the soil.

A combination of proper cultural practices plus prudent use of chemical is sometimes necessary to control weeds effectively in turf. Whenever herbicides are used, container labels should **ALWAYS** be read and followed carefully.

## **Preemergence Herbicides**

Preemergence herbicides affect germinating seeds. To be effective, the herbicide should be applied two to three weeks before weed seeds germinate. Consequently, preemergence herbicides are most effective against annual weeds. For control of summer annuals such as crabgrass, application of preemergence herbicides between May 5 and May 20 in the Twin Cities area is most effective in a normal year.

## **Postemergence Herbicides**

Postemergence herbicides are used to kill weeds after the weed plants are up and growing. To be effective, most postemergence herbicides must be absorbed through the leaves; consequently, liquid sprays generally work better than dry, granular materials. However, granular formulations may be the most practical way for homeowners to apply these materials.

Postemergence herbicides are most effectively applied when weeds are young and growing vigorously.

**Selective postemergence herbicides** are usually used to control annual, biennial, and perennial broad-leaved weeds because they will kill many broadleaf plants without damaging grass plants. These herbicides can severely damage or kill trees, shrubs, and flowers; thus, they should be used with great care near these plants.

Postemergence herbicides may be applied any time the weeds are actively growing, the air temperature is 60–80 degrees F, there are no winds, and there is no rain in the forecast for 48 hours. Most effective control of perennial broadleaf weeds is obtained when applied in early fall (August 15–October 15) or in spring (May 1–June 1). For some weeds, repeated application at 20–30 day intervals may be required for control.

**Nonselective postemergence herbicides** kill all plants, both desirable and undesirable. These herbicides can be used to spot treat perennial grassy weeds that are not affected by selective herbicides. To spot treat an area, thoroughly wet the weed foliage with herbicide solution.

**Preemergence or selective preemergence granular** materials may be applied with a fertilizer spreader. The spreader must set or be calibrated to apply recommended rates. The preferred method of application is to apply one-half the recommended rate in one direction and one-half at a right angle to that direction.

Compressed air sprayers or sprayers attached to a garden hose are effective for liquid applications. Remember that the higher the pressure and the finer the mist, the more likely it is that the herbicide will drift and injure shrubs, trees, flowers, and vegetables. Sprinkler cans can be used on small areas, but once any applicator has been used to apply herbicides, it should not be used to spray other pesticides on ornamental or garden plants. You should use a separate sprayer for killing weeds. Be sure to clean the sprayer thoroughly after each use.

**Table 1. Summary of Chemical Weed Control Methods for Home Lawns**

**Broadleaf weeds**

Dandelion (P)  
 Dock (P)  
 Plantain (P)  
 Purslane (P)  
 Thistle (P)  
 Black Medic (A)  
 Chickweed (A or P)  
 Clover (P)  
 Ground Ivy(Creeping Charlie) (P)  
 Henbit (WA)  
 Knotweed (A)  
 Mallow (A or P)  
 Spurge (A)  
 Yarrow (P)

These weeds are best controlled by selective postemergence herbicides. Early fall is the best time to control winter annual (WA) and perennial weeds (P). Spring is the best time for summer annual (A) weeds. Apply when soil is moist and weeds are young and actively growing. Dicamba can be dangerous to trees and shrubs because it can move in the soil and be taken up by tree shrub roots.

**Grass Weeds**

Annual bluegrass (A, P)  
 Barnyardgrass (A)  
 Crabgrass (A)  
 Foxtail (A)  
 Goosegrass (A)  
 Bromegrass (P)  
 Quackgrass (P)  
 Tall Fescue (P)  
 Creeping bentgrass (P)

Use preemergence herbicides. Apply two to three weeks prior to expected germination of weed seeds. Some of these herbicides may injure fine fescues or bentgrasses. Most preemergent herbicides will harm newly seeded grasses except siduron (Tupersan).

These weeds can be controlled only with nonselective herbicides. Spot treat only because herbicide will also kill desirable grass plants. Apply when weeds are actively growing.

A = Annual

P = Perennial

WA = Winter annual

**This information is current as of the date of printing. Read and follow the label directions for the use of all pesticides.**