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# Lawn Weed Control

Weeds often infest and ruin the appearance of an otherwise fine lawn. Herbicides can help eliminate the weeds. The use of weed killers should be considered as a supplement to, not a replacement for, good cultural practices. Following are practices that aid in developing a good turf cover, which in turn will leave little room for weed development.

1. Fall or early spring applications of the proper fertilizer and lime treatments are recommended to produce vigorous growth of the turf grasses.
2. Encourage the growth of a good turf cover by adhering to a minimum cut of  $1\frac{1}{2}$  inches on the Kentucky bluegrass type of lawn. Adherence to these requirements may not keep a lawn free of weeds, but seldom will a lawn be ruined by a serious infestation of weeds.
3. Use periodic waterings, sufficient to penetrate 4 to 5 inches into the soil, rather than frequent light sprinklings. Only wetting the surface of the lawn encourages crabgrass and other weeds, whereas deep penetration is necessary to aid the desirable grasses.

Perfect maintenance is seldom achieved on all lawns in a neighborhood, and weeds may spread from lawn to lawn. It is often necessary to seek the aid of herbicides to help control weeds. The weed problem will dictate what chemical is necessary to aid in the particular situation.

## Crabgrass

Crabgrass is a summer annual which develops from seeds produced the previous year. The plant is very sensitive to shade but will grow under a wide range of soil conditions. If you can control seed production for several years, the viable seed supply in the soil would diminish to the point where this weed would no longer be a serious threat to the lawn. In lawns with only a few scattered crabgrass plants, the best way to control them would be by persistent hand weeding before seed formation. Observe good maintenance practices.

If a good stand of lawn grasses is threatened to be smothered by an abundance of crabgrass, chemicals for selective killing of the crabgrass are available. Inasmuch as various formulations are available, follow the instructions on the label carefully when using a chemical. It appears that phenyl mercuric acetate is the better chemical to use early in the crabgrass season, whereas either potassium cyanate or disodium monomethylarsonate would be better later in the summer.

## Chemicals Available and Suggestions for Using Them:

1. Phenyl Mercuric Acetate (PMA) - Use 1 to 2 ounces (2 to 4 tablespoons) of a product containing 10% PMA to 1 gallon of water per 1000 square feet of lawn. This treatment should be started early when the crabgrass is less than 1 inch tall. Three or more applications at 7-

10-day intervals are required to kill the crabgrass. By applying the material when the soil moisture is adequate, less injury to the turf grasses occurs. Some yellowing of the lawn usually occurs but it has not been too serious.

2. Potassium Cyanate - Use 3 to 4½ ounces per gallon of water for each 1000 square feet of lawn. This is possibly the best treatment for late July and through August. This treatment causes a browning of turf blades of the grass, which usually disappears after 2 or 3 weeks. Retreatment will probably be necessary. Make these retreatments at 7- to 10-day intervals until the crabgrass is completely killed.
3. Disodium Monomethylarsonate (a relatively new chemical) - Use 1½ to 3 ounces of DSMA in 1 gallon of water per 1000 square feet. Best results have occurred when used during cool, moist weather. Label directions usually specify reduced rates during hot weather. Usually three weekly applications are required to kill the crabgrass completely. If excessive discoloration of permanent grasses occurs, use the lighter rate or lengthen the interval between applications.

Equal results have occurred with either liquid or dry formulations of PMA and DSMA when applied according to the manufacturer's directions. In most cases the lower rates stated may be used with less discoloration resulting to the permanent grasses, but at the same time more retreatments would probably be necessary to control the crabgrass.

Once the present year's crabgrass plants are killed, it is essential that proper cultural treatments for good lawn care be followed. Open areas or thin sod will be left after the chemical treatments and these areas will be reinfested the following year. These areas should be reseeded to desirable species in the fall.

#### Broadleafed Weeds

Weeds such as dandelions, broad- and narrow-leaf plantain, ground ivy, and many other broadleaf weeds should be controlled with chemicals in established lawns. Most lawn grasses except creeping bent grass will tolerate concentrations of 2,4-D necessary to kill these weeds. Applications made early in the spring and early in the fall during the peak periods of weed germination and growth are usually the most effective. Sprays are cheaper than the dust formulations. Apply the chemical in a coarse spray under low pressure. On small areas a sprinkling can may be used.

Use 2 tablespoons of an amine or sodium salt of 2,4-D in 1 gallon of water per 1000 square feet. Fall applications of 2,4-D are more desirable than spring applications. The kill of dandelions, plantain, curled dock, and other perennial weeds in lawns is good and the turf grasses have a chance to fill in the sod prior to crabgrass emergence.

### Spot Treatment of Broadleafed Weeds

Weeds such as wild onion, wild garlic, dandelion, and plantain may be killed with localized treatments of 2,4-D without spraying the entire lawn. Prepare a 2,4-D solution of 5 ounces or 10 tablespoons of an amine salt of 2,4-D to 1 gallon of water. Place a rubber glove over your hand to protect it from the chemical, and pull an absorbent cotton glove over the rubber glove. Apply the solution to the wild onion by dipping your gloved hand into the mixture and then firming your hand around the tops of the weed. Press hard enough to break through the waxy coating on onion or garlic leaves. This will permit the chemical to penetrate into the plant and move downward, killing both the above- and the below-ground parts. For the control of dandelions, plantain, and curled dock, the same solution is used. Fasten a piece of kitchen sponge to the end of a stick or broom handle, then dip the sponge into the solution and spot treat broadleaf weeds by pressing the moist sponge against the crown of each plant. Desirable plants nearby will not be injured if you are careful not to touch their foliage. This spot treatment method eliminates the danger of spray drift and allows the operator to kill weeds growing close to desirable flowers and shrubs.

### Chickweed

Chickweed is a broadleaf weed which does not respond to a 2,4-D application. Chickweed is a winter annual which starts to germinate in August and continues until frost. The best time to kill this particular weed is when the plants are very small. When the weeds are about 1 inch in height, use 3½ ounces of potassium cyanate or 4 tablespoons of an amine salt of dinitro in 1 gallon of water for 1000 square feet of lawn. Both of these herbicides are contact weed killers; therefore, good coverage of all parts of the chickweed is necessary if control is to be obtained. Two or three applications may be needed. The best results are obtained when the temperature is about 60° F. when the spray is applied. Recently 2,4,5-TP has shown considerable promise for killing chickweed. It will also kill clovers. Inasmuch as various formulations are available, use according to the manufacturer's suggestions. Spray weeds as soon after emergence as possible, as they are killed most easily at that time.

### Wild Onion and Wild Garlic

The waxy, cylindrical leaf of these plants requires a different type of 2,4-D to effectively kill them. Use 1 ounce or 2 tablespoons of a low volatile ester formulation of 2,4-D in 1 gallon of water per 1000 square feet of lawn. Spot spray clumps of onion, wetting the foliage thoroughly. Spray in April and again in October. Following this program systematically for two years should clear a lawn of this weed.

### Control of Spot Infestations of Weedy Grasses

Grasses such as orchard grass, timothy, quackgrass, Bermuda or wiregrass, goose grass, Dallas grass, nimblewill, and others may be killed with an

application of dalapon or TCA when they occur in spot infestations in lawns. Prepare this solution by dissolving 1/4 pound of dalapon or 1/2 pound of TCA in 1 gallon of water. Use a syringe or other application device and wet the crowns of the weedy plant grasses. These chemicals will also kill other desirable turf grasses, so limit the application to the crowns of the weedy grasses.

Precautions:

Avoid getting any of these chemicals on vegetables, flowers, shrubs, or other desirable plants which you do not want to injure or kill. Avoid spraying these chemicals on windy days. It is not recommended to apply 2,4-D on new lawn seedings. Follow the precautions listed by the manufacturer for all of these chemicals.

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