

# Weed Control Notes

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CONTROL OF WEEDS AROUND WOODY PLANTS

Control Series 44

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Several herbicides are now available that will prevent the growth of weeds without injuring desirable woody plants. Most of these materials are preemergent herbicides which kill weeds as they start to germinate. For the most part, they do not injure the woody plants or control weeds that are already growing. However, when the recommended rate of application is exceeded or label directions are not followed, injury may result. Each material is an individual, controlling a given set of weeds, and is safe to use on a given set of ornamentals. This information is given on the container label and when label directions are followed carefully, there should be no injury.

Materials are recommended on the basis of active ingredient. Various formulations differ in their percentage of active ingredient. Granular materials often contain only 5% active ingredient while a wettable powder may range from 50 to 80%. It is essential that you apply the correct amount of active ingredient per unit area. Use this formula to convert from active ingredient per acre to product per acre:

$$\frac{100}{\% \text{ active}} \times \text{Recommended rate of active ingredient per acre} = \text{Product per acre}$$

#### FOR SMALL AREA APPLICATION:

1. Determine the amount of product to be applied on 1 acre.
2. Determine area involved :  $\frac{\text{Length (ft.)} \times \text{Width (ft.)}}{43,560} = \text{Acres}$
3. Measure or weigh the correct amount of material to cover area.
4. Apply that amount of material uniformly over computed area. (This can be done without calibration of equipment by using an excess of water for spray applications and making several passes over the area until the spray solution is exhausted. With granules, set the applicator very light and continue to go over the area until the material is exhausted).

#### FOR LARGE AREA APPLICATION:

Equipment must be calibrated so that it delivers the correct amount with one trip over the area. This is done by catching and measuring the flow of material from the equipment over a given area. Usually 2 or 3 trials are required before the correct rate is achieved.

#### PREEMERGENCE APPLICATIONS

**DCPA (Dacthal):** Apply 10 lbs. of active ingredient (13 lbs. of 75% wettable powder) in 40 gal. of water per acre. Application must be on clean soil as weeds that are growing will not be killed. Spray will not injure the plant foliage. Annual grass control is excellent, but DCPA is less effective on broadleaf weeds. Granular formulations are also available. Duration of control should be 2 to 3 months.

**DICHLLOBENIL (Casoron):** Apply 4 to 6 lbs. of active ingredient (100 to 150 lbs. of 4% granular material) per acre. Application should be made in the late fall or winter. Some control of emerged weeds can be obtained. Thus if weeds are small, the area need not be clean cultivated prior to application. Control of quackgrass and mugwort (wild chrysanthemum) can be obtained at 150 lbs. rate of application. Dichlobenil is volatile, and when applied to bare soil during warm spring or summer temperatures, activity will be lost. This loss can be prevented by working the material into the upper 2" of soil immediately after application. Duration of control should be 4 to 6 months.

**DIPHENAMID (Enide, Dymid):** Use 4 lbs. of active ingredient (8 lbs. of 50W formulation or 1 gal. of 45% emulsifiable concentrate in 40 gal. of water per acre. Use immediately after

clean cultivation. Diphenamid does not control weeds after they have started to grow. This material is weak on several broadleaf weeds. Spray will not injure plant foliage. Duration of control should be about 3 months.

EPTC (Eptam): Apply 5 lbs. of active ingredient (100 lbs. of 5% granular formulation or 3 1/3 qts. of emulsifiable concentrate) per acre. If E.C. formulation is used, apply as a directed basal spray. EPTC is quite volatile and requires immediate incorporation to a 2 to 4" depth. Where nutgrass is a problem use 120 lbs. of the granular formulation and incorporate to a 4 to 6" depth. Duration of control should be 2 to 3 months.

SIMAZINE (Princep): Apply 2 to 3 lbs. of active ingredient (2 1/2 to 3 3/4 lbs. of 80W formulation or 50 to 75 lbs. of 4% granular formulation) per acre in the fall or winter. Use immediately after clean cultivation. Do not make more than 1 application per year. At higher rates simazine is a soil sterilant controlling all vegetation. Control is usually 6 to 10 months. Diphenamid or DCPA may be used in the spring or summer after a fall application of simazine. Spray will not injure foliage.

TRIFLURALIN (Treflan): Apply 1 lb. of active ingredient (20 lbs. of 5% granular formulation or 1 qt. of emulsifiable concentrate) per acre. If E.C. formulation is used, apply as a directed basal spray. This material is volatile and requires immediate incorporation. All existing weeds must be destroyed before spraying or during incorporation as trifluralin does not kill existing weeds. Duration of weed control is usually 4 to 6 months. Trifluralin is excellent on grasses but does not control several broadleaf weed species.

#### POSTEMERGENCE APPLICATION

SIMAZINE PLUS AMITROLE (Amizine): Use 3 lbs. of simazine plus 1 lb. of amitrole in 40 gal. of water per acre. This is equivalent to 7 lbs. of the Amizine formulation. Apply as a directed spray in the fall or winter. Do not get material on the leaves and stems of plants. This control mixture may also be used to edge walks, around buildings, driveways, etc. As this material contains simazine, do not make more than one application per year.

DALAPON (Dowpon): This material is used for control of perennial grasses. Use 1 lb. of dalapon formulation (85% active) in 7 gal. of water. Apply to green actively growing grass foliage 4" to 8" high. Do not apply beyond run-off for the grass plant. A second application is required 7 to 10 days later. Do not allow the spray to contact foliage of ornamentals. Do not use within the root zone of nandina.

Follow label directions carefully for the use of these herbicides. Do not use on species other than those on the container label. You may experience difficulty in obtaining these materials from local stores. In such case contact your local V.P.I. Cooperative Extension office for names of the nearest supplier.

Trade and brand names are used only for the purpose of information and the Virginia Cooperative Extension Service does not guarantee nor warrant the standard of the product, nor does it imply approval of the product to the exclusion of others which may also be suitable.

#### KEYS TO PROPER USE OF PESTICIDES

1. Read the label on each pesticide container before each use. Follow instructions to the letter; heed all cautions and warnings, and note precautions about residues.
2. Keep pesticides in the containers in which you bought them. Put them where children or animals cannot get to them, preferably under lock and away from food, feed, seed, or other material that may become harmful if contaminated.
3. Dispose of empty containers in the manner specified on the label. If disposal instructions are not printed on the label, burn the containers where smoke will not be a hazard, or bury them at least 18" deep in a place where water supplies will not be contaminated.

SEE YOUR DOCTOR IF SYMPTOMS OF ILLNESS OCCUR DURING OR AFTER USE OF PESTICIDES.

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