

Weed Control Notes

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EXTENSION DIVISION

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WEED CONTROL IN CHRISTMAS TREE PLANTINGS

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SITE PREPARATION

WOODY PLANTS: 2,4-D + 2,4,5-T* (brushkiller) is highly effective on a wide variety of woody species. Foliar application is made when woody plants are actively growing in June or July. Mix 4 lb of 2,4-D + 2,4,5-T (1 gal of 4 lb/gal formulation) with 100 gal of water and wet the foliage. Application may be made with a hand sprayer, a farm sprayer equipped with a hand gun, or by a commercial applicator with helicopter. Application must be made so that spray drift is not a problem. Drift control is the legal responsibility of both the applicator and farm operator.

A basal treatment of brush up to 3" in diameter may be applied any time of the year. Mix 12 lb of 2,4-D and/or 2,4,5-T (3 gal of 4 lb/gal formulation) with 100 gal of # 2 fuel oil. Spray to wet the lower 12" of stem and soil at base of stem. Treatments made in oil also kill grass and any other vegetation on contact.

PERENNIAL GRASSES: Perennial grasses can be controlled with either amitrole-T or dalapon. In the late summer, mow the proposed planting site. When the regrowth reaches 3" to 6" (before October) treat planting strips 2' wide. Use amitrole-T at 2 lb active ingredient/A (1 gal of 2 lb/gal product), or 12 to 15 lb of dalapon product in 100 gal of water per acre treated. Thus on a 5' spacing only 2/5 or 40% of a planted acre would be treated. Cost of these treatments is in the range of \$15 per treated acre, or \$6 per planted acre for the situation described above.

An alternative method is to use amitrole-T at 2 lb active ingredient/A in the spring 7 to 10 days prior to transplanting. Effective control depends upon how actively the foliage is growing at the time of application. In some states application of the amitrole-T has been made during the planting operation by mounting the sprayer nozzle immediately ahead of the planter. This technique has not been evaluated in Virginia. Care must be taken to insure that amitrole-T does not contact the foliage of the tree seedling.

Bermudagrass, also called wiregrass, is very difficult to control and requires 2-3 applications of dalapon or amitrole-T. Thus the preferred method for bermudagrass control would be to make treatments in the summer prior to tree planting. The first treatment should be made in June or July when growth reaches 4" to 6" high. Repeat application at 2 to 4 week intervals on the regrowth.

* 2,4,5-T is not to be used around the home, recreational areas, pond or ditch banks, or similar sites.

NEW PLANTINGS AND ESTABLISHED STOCK

PREEMERGENCE TO WEEDS: Annual grasses and broadleaf weeds coming from seed can be controlled by use of preemergent herbicides. These materials do not control established weeds. Thus for treatment to be effective, existing weeds must be killed prior to application by chemical or cultural means. Do not make application of these herbicides until rainfall has firmed the soil around the tree foliage and may be applied directly over the trees.

D CPA (Dacthal): Use 10 lb active ingredient per acre (12.5 lb of 75% formulation). This material has a rather short soil residual period (2 to 3 months). It is quite safe and should not cause injury. It is safe to use over newly planted trees. More than one application per year may be applied.

Dichlobenil (Casoron 4G): Use 100 lb of 4G formulation per acre in the late fall or winter. Use only on well established plants. Frazer fir is quite susceptible to dichlobenil. Established bluegrass, orchardgrass and quackgrass are susceptible to dichlobenil. Do not make more than one application per year.

Diphenamid (Dymid, Enide): Use 4 lb active ingredient per acre (8 lb of 50W or 5 lb of 80W formulation). Diphenamid is relatively safe and has a 3 to 4 month life in the soil. Its main limitation is that it does not control several species of broadleaf weeds. These include ragweed, fleabane (Erigeron sp.), cocklebur, jimsonweed and others. It will not kill established weeds or grasses.

Simazine (Princep): Use 3 lb active ingredient per acre (3.75 lb of 80W or 75 lb of 4G formulation). Simazine should not be used on trees that are less than 3 years old. It is the longest lasting of the materials listed. Its selectivity is based on its relative insolubility. If it reaches the tree roots, injury or death will result. Do not use simazine: a) before the ground is firmed around the tree roots; b) at excessive rates; c) on seedlings less than 3 years old; or d) on sandy soils. Do not make more than one application per year. Fall or winter applications have given the best results and will usually control established grasses.

POSTEMERGENCE TO WEEDS: Often weed growth may be present before application can be made. As preemergent treatments will not kill established weeds, it is necessary to use more drastic treatments for their control. Such treatments will kill or injure the trees if allowed to contact them.

Amitrole + Simazine (Amizine): Apply 1 lb of amitrole + 3 lb of simazine (7 lb of Amizine) in 50 to 100 gal of water per acre. Do not exceed rate or use on sandy soil. So not retreat or apply simazine within 1 year. Direct spray so that tree foliage is not contacted. As this mixture contains simazine, the above precautions for simazine also apply.

Paraquat: Use 1 to 2 quarts in 50 to 100 gallons of water per acre. This is a contact material and kills only on contact. Only that portion of a weed or tree contacted by spray will be injured. Good coverage is essential. Paraquat has no residual activity in the soil. Paraquat is toxic to humans and to wildlife. Do not get material on skin. Do not use around areas likely to be contacted by children or pets.

2,4-D + 2,4,5-T* Foliage Spray: This treatment is used to control undesirable woody plants in the plantation. Application should be made after the new growth is hardened. Care must be taken to avoid contact of the spray material with the Christmas trees. Use the same rate and precautions mentioned under site preparation. A stove pipe or bucket may be placed over a small tree to protect it while spraying around it. Use low pressure 20 to 30 psi and a large nozzle (8003 or equivalent) which will result in large spray droplets. This is an emergency treatment only, as such woody plants should have been destroyed before planting into the area.

2,4-D + 2,4,5-T* Basal Spray: This method of application offers the advantage of application at any time of the year and less chance of Christmas tree injury, as the spray need only be applied to the lower portion of the undesirable plant. Directions for use are given under the section on site preparation.

* 2,4,5-T is not to be used around the home, near recreational areas, pond or ditch banks, or similar sites.

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.