



CONTROL

**of weedy grasses
around the home**

**UNIVERSITY OF CALIFORNIA
AGRICULTURAL EXTENSION SERVICE**

CONTROL OF WEEDY GRASSES AROUND THE HOME

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WEEDY GRASSES are often difficult to eradicate in areas around homes, especially in lawns, gardens, and pathways. It is wise to eliminate as many weeds as possible before seeding the lawn, making permanent plantings, or establishing paths and drives around a new building. This can be done by frequent watering to germinate the weed seeds in the soil, and shallow cultivation to destroy them. Chemicals may also be used.

Re-infestation with weedy grasses occurs in many ways. Control by hand weeding or with chemicals is often necessary in established plantings. The choice of method depends on the plants growing in the area and the particular weed pests present.

Treating Before Planting

Often you can eliminate or reduce a potential weed problem by treatment before planting. Calcium cyanamide is a common treatment for areas to be planted to lawn. Soil fumigants such as methyl bromide, SMDC (Vapam or VPM) or DMTT (Mylone) also can be used. These often are used for smaller planting areas such as beds for flowers or other ornamentals.

Calcium cyanamide is applied dry by hand or with a spreader to areas that have been leveled and prepared for lawn seeding. The usual rate is 50 pounds per 1000 square feet. Apply 25 pounds and work it into the soil to a depth of two to three inches, then apply 25 pounds and leave it on the soil surface.

Keep the treated area moist with frequent sprinkling for a period of 30 days before planting the turf. During this period, the cyanamide slowly breaks down and kills many of the germinating weed seed. Since cyanamide contains about 20 per cent nitrogen, it also acts as an excellent fertilizer after this 30-day period of toxicity, and part of the cost of the treatment can be charged to fertilization. It will insure the young turf of a sufficient supply of nitrogen for rapid, healthy growth.

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chlorate, effective for this purpose, are available in 4- or 5-pound packages at most garden supply stores. Larger quantities can be purchased through agricultural chemical dealers. Apply the dry mixture at the rate of 2 to 4 pounds per 100 square feet. For heavy stands of a weedy grass such as Bermuda, a heavier rate of application is advised—perhaps 4 to 6 pounds per 100 square feet.

Other materials available for this purpose are monuron (Telvar W), diuron (Karmex W), simazine (Simazine) and atrazine (Atrazine). Use at a rate of $\frac{1}{2}$ to 1 pound per 1,000 square feet for general sterilization, and up to $2\frac{1}{2}$ pounds per 1,000 square feet for Bermudagrass. This is a much lower rate than is required for the borate-chlorate mixtures, but they are more expensive per pound. Combinations of monuron with borate and chlorate are also available and highly effective.

With these materials, moisture is required to carry the chemicals into the soil where they can become effective. If the materials are applied during the winter, rainfall may be sufficient for this purpose, but with spring or summer application, the materials should be thoroughly sprinkled in. Since such chemicals act through the soil, they can be absorbed by any plant roots in the treated area, and so do not use near trees or shrubs which might have roots growing in the area to be sterilized.

A combination of amitrole and simazine (Amizine or X-All) can be used to control annual weeds. This combination is quite effective for controlling annual vegetation when applied to small weeds in late winter or spring. Treat the weeds before they develop strong woody stems as they will require more chemical to obtain thorough coverage and the dead vegetation will remain standing for the remainder of the season. Small, actively growing weeds are killed more rapidly than are plants more fully developed.

Rates of 1 pound amitrole and 3 pounds simazine per acre have provided satisfactory control of annual weeds among many well-established woody ornamentals without any injury to the ornamental when applied as a directed spray, keeping the chemical off the desirable plant.

Do not use this material to control weeds in lawns, flower or vegetable beds, or around lilacs or honeysuckle.

Treating Established Plantings

The problem of eliminating grasses that have invaded existing plantings of lawn or ornamentals may be difficult. Hand pulling or digging the weeds may be necessary to save the desired plants. Chemical control is not always possible because chemicals with the desired selectivity may not be available.

Selectivity may be increased in some instances, but only by careful application of the chemical. For example, diesel oil or weed oil is an excellent control for young annual weeds of all kinds, including grasses. It can be used in and around woody ornamentals by spraying carefully to keep the oil off the desired plants.

Some growers cover the nozzle of a common garden sprayer with an inverted funnel to confine the spray and protect the ornamentals. For easy and more rapid control of young grasses in a flower bed, home gardeners may use a paint brush to apply the oil. Repeated treatments with oil will control even such perennial pests as Bermudagrass and nutgrass.

Dalapon (Dowpon) also is highly effective as a grass killer although not entirely selective. It will affect all grasses and some broad-leaved plants. It can be used as a spot treatment for undesirable grasses in lawns but will kill any desirable ones that are sprayed. Low rates, such as 1 ounce per gallon of water have been used on dichondra with only slight temporary burning of the foliage.

Spray lightly to just wet the grasses, don't drench them, and don't water immediately after. Dalapon is used for control of Bermudagrass in open areas at somewhat higher rates ($1\frac{1}{2}$ to 2 ounces per gallon of water) but repeated spraying is necessary to eliminate the weeds.

Amitrole (Weedazol or Amino Triazole) also can be used to control annual weed growth in and around woody ornamentals if spray is kept off the desired plants. Methods of application similar to those described for oils can be used successfully with amitrole.

If vegetation is 4 inches or less in height, use $\frac{1}{4}$ ounce of amitrole ($\frac{1}{2}$ ounce of Weedazol or Amino Triazole) per gallon of water. If growth is over 4 inches tall, double the rate of amitrole. Repeated applications will be necessary as regrowth occurs.

Spray to wet the weed growth thoroughly but do not drench them and do not water immediately after application. For selective control of annual vegetation among well established woody ornamentals, see discussion on the combination of amitrole and simazine under the section on "Sterilize Paths, Walks, and Driveways."

Special Problems

CRABGRASS, a common pest of lawns during the summer months, is discussed in a separate One-Sheet Answer, "Control of Crabgrass in Home Lawns," available from the Public Service Office of the University of California or from your county Farm Advisor.

ANNUAL BLUEGRASS (*Poa annua*) is often a weed in lawns during cool weather, especially in shady places where the lawn grass has died out. You can discourage it by selecting a suitable lawn grass for the location. Avoid excessive watering, and provide proper aeration. Isopropyl-N-phenyl carbamate (IPC) is used in the chemical control of annual bluegrass at the rate of 4 to 6 pounds per acre, or 1 to 2 ounces per 1,000 square feet.

GENERAL ANNUAL VEGETATION can be controlled readily with a combination of Amitrole plus any one of the following soil sterilants: monuron, diuron, simazine, or atrazine. Apply in late winter or early spring when some rainfall is expected, any time after the vegetation has emerged until it is approximately 4 inches tall. During this stage, the recommended rate is 1 pound of amitrole plus 5 pounds of any one of the soil sterilants. If the vegetation is taller than 4 inches, use 2 pounds of amitrole plus 5 pounds of soil sterilant. Base your choice of soil sterilant on the amount of rainfall expected. Use diuron or simazine in areas where more than 3 to 5 inches of rainfall is expected. In areas of less than 3 inches of rainfall, select either monuron or atrazine. Use care in applying these combinations around annual ornamental plants, as injury may result.

Use only the combination of amitrole plus simazine around established trees or shrubs, at the rate of 1 pound amitrole to 3 pounds simazine. Avoid contacting the foliage of the desirable plant.

OTHER WEEDY PERENNIAL GRASSES can be controlled by repeated cultivation during the dry season to expose the roots and dry them out quickly. No completely selective weed killer will control such weedy perennial grasses as Bermudagrass, Kikuyugrass, Johnsongrass, and St. Augustinegrass.

Oil Spraying is an established method of control of Bermudagrass where cultivation is difficult and soil sterilization is not desirable. Oil companies are marketing special oils of high plant toxicity especially suited to weed killing. These oils are more consistent in their action than diesel oil.

Repeated sprayings with these oils are necessary to keep weedy perennial grasses under control and eradicate them. Permit the grass to make some growth between sprayings, but do not allow it to go to seed. There is no long-time effect of the oil on the soil, so planting can be done in oil-sprayed areas a few days after the weeds have been eradicated. Oil sprays can be used near trees or shrubs if the spray does not contact the desirable plants.

Sodium TCA, also used as a grass killer, is sold in solid form that is readily soluble in water. Dissolve 1 pound of the chemical in 1 gallon of water to make enough spray to cover about 250 square feet.

Although the top growth of most plants will be killed or damaged by the spray, root kill results only from contact of the roots with the chemical in the soil. It is important to get sodium TCA into the soil. The sprayed area should therefore be watered immediately after spraying.

Sprinkle thoroughly again one week later to insure washing the chemical into the soil. It will take several weeks to kill a weedy perennial grass such as Bermudagrass. After the weedy grass is dead, the soil can be worked and irrigated or sprinkled several times to leach the chemical out of the root zone. The treated area should not be planted for several months.

Since TCA is not selective, it will kill or damage any plants that are wet with the spray or that absorb it from the soil. It should not be used near desirable trees, shrubs or vines.

Dalapon (See section "Treatment in Existing Plantings".)

Soil fumigants, particularly methyl bromide, can be used for spot treatment to eliminate all vegetation including perennial grasses. The treated areas can be replanted in a week or two. Methyl bromide is discussed under treatment before planting.

Soil sterilants, such as monuron, diuron, simazine, atrazine, and the borate-chlorate mixtures, are also effective on these grasses, as discussed under sterilization of paths, walks, and driveways, but they last for a longer time in the soil, and should not be used where it is desired to replant within several years.

To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products which are not mentioned.

PRECAUTIONS

1. Herbicides vary in toxicity to man and animals but all should be used with care.
2. Always read and follow the directions for use on the label.
3. Treat only such areas or species as are recommended on the label.
4. Avoid drift of sprays onto susceptible ornamental or garden plants and into fish ponds.
5. Keep herbicides in a locked cabinet out of reach of children, pets, irresponsible persons, and livestock.
6. Store herbicides in their original containers.
7. Avoid wetting clothing with herbicide sprays, and change and wash clothing after spraying.