

WEED CONTROL

in landscape ornamentals

Whether the weed is a grass, a sedge or a broadleaf plant dictates the control and the timing of the control.

By CAROLYN STEADMAN

With all weeds, it's important to prevent the plant from setting and dispersing seeds, either by cultivation, hand weeding or herbicides. No seeds means many fewer weeds the next season.

There are several approaches to controlling weeds in ornamentals. Planning to eliminate weeds before planting and developing a post-planting strategy are ways to minimize the weed problems in landscape beds.

The plan-before-planting-approach developed by Dr. Joe Neal, associate professor at North Carolina State University (while he was a weed specialist at Cornell University) has five steps:

1. Site assessment. Survey the site for cultural and weed information. Note particularly any weeds that are difficult or impossible to control after planting such as bamboo, Japanese knotweed and field horsetail. Include the surrounding areas in the survey, as weeds can and do encroach on plantings. Scout for weeds in mid-to-late summer. Consider soil pH, soil type, drainage.

2. Define the type of planting. Does the plan call for only woody ornamentals, or will a ground cover or herbaceous annuals or perennials be used? The kind and mixture of plants will determine the usefulness of weed man-



The kind and mixture of plants will determine the usefulness of weed management options like geotextiles, mulches and/or herbicides.

agement options like geotextiles, other organic and non-organic mulches and herbicides. A mixed planting of woody and herbaceous material has fewer post-plant options. For example, in a planting of trees and shrubs, geotextiles and a thin layer of mulch are options for weed control. There are also several herbicides that are labeled for use on woody plants that will injure herbaceous material. Geotextiles are not generally used in a ground cover bed, or with mass plantings of annuals or perennials.

cont. on page 61

Preemergent herbicides

benefin+oryzalin, (XL), used for control of many annual grasses and some broadleaf weeds in newly planted or established landscape plantings, including some flower bulbs and ground covers. Irrigation, rain or shallow cultivation (one to two inches) is needed for activation.

bensulide (Betasan, Lescosan, and others) used for control of annual grasses and several broadleaf weeds in selected woody and herbaceous ornamental plantings.

EPTC (Eptam) used for control of annual grasses and many broadleaf weeds and some perennial weeds in ground covers and some flowers. Must be physically incorporated into a loose, clod-free soil to a depth of two to three inches immediately after application. Thorough mixing is necessary for good control.

isoxaben (Gallery) used for control of certain broadleaf weeds in landscape ornamentals, ground covers and ornamental bulbs. It must be activated by 1/2 inch of water after application.

oryzalin (Surflan) surface-applied herbicide for control of annual grasses and many broadleaf weeds in established and newly planted field-grown ornamentals, ground covers, bulbs and some flowers. It must be activated by 1/2 inch of water. It may be cultivated one to two inches.

prodiamyl (Factor, Barricade) selective preemergence residual control of many; annual grasses and broadleaf weeds in landscapes. It must be activated with 1/2 inch of water as soon as possible after application.

pendimethalin (Pendulum, Southern Weedgrass Control) used for control of grasses and certain broadleaf weeds in woody ornamentals, perennials, wildflowers and ground covers. Should be applied to weed-free soil. Must be activated by irrigation and to remove granules from foliage.

trifluralin (Treflan, Preen, and others) used for control of annual grasses and broadleaf weeds in landscape ornamentals, ground covers, roses and many annual and

perennial flowers. Apply before weed seed germination or to clean cultivated weed-free areas. Must be incorporated within a few hours of application.

trifluralin+isoxaben (Snapshot 2.5TG, Professional Preen) used for control of broadleaf weeds and annual grasses in landscape ornamentals and ground covers and perennials. Professional Preen is a new product introduced in 1998. Can be applied prior to weed germination or immediately after cultivation.

Post emergent herbicides are applied to actively growing weeds. There are selective and non-selective products. The non-selective products injure or kill any vegetation contacted. The selective products kill or injure some plants but not others.

Post emergent herbicides

bentazon (Basagran T/O) used for control of seedling broadleaf weeds, yellow nutsedge, and annual sedges in selected field grown ornamental trees, shrubs and ground covers. Apply as a directed spray to small and actively growing weeds under good soil moisture.

fenoxaprop (Acclaim) used for control of annual grasses in landscape ornamentals, annuals and perennials. Apply to young (seedling to 3-tiller) actively growing grasses.

glyphosate(Roundup Pro) used for non selective control of most herbaceous and many woody plants. Used for pre-plant cleanup and post-plant directed spray or spot spray for general weed. Apply to actively growing plants. Do not apply if rainfall or overhead irrigation will occur within six hours.

fluazifop-p (Take Away, Ornamec, Fusilade II) used for control of annual and perennial grasses. May be applied over the top of many woody and herbaceous ornamentals in landscapes. Should be mixed with a non-ionic surfactant. Spray annual grasses at two to eight inches tall before tillering. Spray perennial grass during spring growth flush but before heading.

cont. from page 58

3. **Select ornamental species and weed management options.** Choose species with design and site compatibility. If you have a hard-to-control weed on the site, it's useful to consult the label of the control to determine which ornamentals are compatible with the herbicide.

4. **Site preparation.** Control weeds which cannot be controlled after planting. The best time to control perennial weeds is before planting. They can be controlled by repeated cultivation, fumigation or Roundup Pro.

5. **Installation and implementation.** After all the preparation, don't introduce new weeds with the new plants. Watch out for weeds on soil balls as you transplant.

The post-planting and established landscape planting options include organic or inorganic mulches, hand weeding and the use of post emergent herbicides. Mulches serve several functions, they help to conserve soil moisture, they help to keep weed seeds from germinating and the organic mulches decompose and add organic matter to the soil. Organic mulches include many kinds of bark, compost products, pine needles, buckwheat hulls and many others.

To be effective, an organic mulch should be three to four inches thick. When using an organic mulch, it's wise to check the pH of the material. For example, pine needles have an acid pH and so are useful

cont. on page 64

Pelargonic acid (Scythe) non selective contact herbicide for control of most young, succulent and actively growing weeds. May be used in and around walks, driveways, flower beds, trees and shrubs. Ensure thorough wetting and complete coverage of all unwanted vegetation, but avoid run-off.

sethoxydim (Vantage) over the top or directed herbicide for the control of grasses in trees, ornamentals, and ground covers. Should be applied to small actively growing grasses that have not been mowed.

cont. from page 61

around ornamentals that require a low pH such as rhododendrons.

Inorganic mulches include geotextiles, marble chips, crushed rocks and many others. Inorganic mulches do not decompose, and a layer one to two inches, especially when used in conjunction with a geotextile is usually enough. The area of the country often dictates the kind of mulch that's readily available. If weeds grow through or germinate on the mulch/geotextile fabric, remove them while they're small to prevent tearing holes in the fabric.

There are many herbicides registered for use in the landscape. Each one has specific target pests and plants that will not be injured by exposure to the chemical. The following is a sampling of herbicides registered for use on landscape ornamentals. It's not intended as an endorsement, nor is criticism implied by an omission. Always read and follow the directions on the label. **LM**

Update on herbicide changes

Dr. Larry Kuhns, professor, department of ornamental horticulture at Pennsylvania State University, reports some recent changes in the herbicide market.

1. Dacthal, Derby, Pennant 5G and Snapshot WP are no longer available.
2. Regal Chemical Co. has generic products that are registered for landscape use. Regalkade G (granular formulation of proflaminate, the active ingredient in Barricade and Factor); RegalStar II (granular formulation of oxidiazon and proflaminate, the active ingredient in Ronstar and Barricade); and Regal O-O (granular oxidiazon and oxyfluorfen, the active ingredients in Ronstar+Goal).
3. There have been name changes: Fusillade is now Fusillade II; Prism is now Envoy; Roundup is Roundup Pro.
4. There is a new product, Professional Preen (granular formulation of trifluralin and isoxaben, the active ingredients in Snapshot 2.5TG)

There are many weed control choices for the landscape manager. If time allows for eliminating weeds before a new landscape bed is planted, an effective weed management option is already in use. The wide variety of herbicides used in conjunction with geotextiles, other mulches and hand weeding present workable options.

For chemical control options that are registered for use in your area, check with the local experts. Always read and follow the label.



"TURFGRASS TRENDS is geared toward conveying information, not advertising . . . I consider it to be the best publication in my field."

Barry Carter
Golf Course Superintendent
Oak Hills Country Club
San Antonio, TX

Your position demands tough choices and critical decisions . . . the kind of hands-on information you'll get in each issue of **TURFGRASS TRENDS**. Find out why it's the #1 research digest for turf managers—begin your subscription today!

Acct.# _____ Exp. Date _____
Billing Address _____
City _____ State _____ Zip/Postal Code _____
Signature _____ Date _____
Name (please print) _____
Title _____
Business _____
Shipping Address _____
City _____ State _____ Zip/Postal Code _____
Country _____
Phone () _____ Fax () _____
Internet/E-Mail _____

U.S. & Canada 6 months, \$96 1 year, \$180 Payment enclosed
All other Countries \$210 (1 Year) Payable in U.S. funds drawn on a U.S. bank.
 Charge my subscription to: VISA MasterCard American Express

**TurfGrass
TRENDS**

AN ADVANSTAR PUBLICATION

131 W 1ST STREET, DULUTH, MN 55802-2065 • PHONE 1-800-346-0085, EXT 477 • FAX 218-723-9437