

# Integrated plan needed for warm-season weeds

*Winter broadleaf weeds are an opportunity or a headache for the turfgrass manager. If control is late, customers should expect multiple applications and slow results.*

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**F**or the professional turfgrass manager, late winter and early spring often rings in the new season with a deluge of irate customers calling about winter weeds.

By their nature, winter weeds usually do not die until hot temperatures of early summer. Until then, these weeds are an eyesore for homeowners and because of their maturity are difficult to control for the professional turfgrass manager.

Usually, multiple applications are required to control these, which really drive up labor costs. One also needs to be for-

mulating and applying a strategy for pre-emergence crabgrass control at this time.

## Have a program

Weed management is an integrated process involving intelligent selection and use of herbicides and good cultural practices.

Start with proper identification. Often, turfgrass managers are forced to identify weeds on the basis of the vegetative structures, such as ligules, leaves and stems. An excellent weed identification guide is *Weeds of Southern Turfgrasses*, a publication available through Clemson University for \$8.00 per copy. Call 864/656-3261 for ordering information. Check also with Cooperative Extension Services in Georgia, Alabama and Florida.

Winter weeds germinate in late summer through early fall when daytime temperatures consistently drop in the 70s. They grow throughout the winter, and flower or produce seedheads during late winter and early spring. Winter weeds are sneaky in that they blend with the turf in the fall and early winter months and do not become noticeable until late winter, when growth spurts, along with seedheads and flowers, producing a ragged appearing turf.

## Scouting for success

To control the weeds, you've first got to identify them by scouting. This will give you valuable information about where the weeds are so you can make informed decisions. Break the service area into logical sections or units and determine which weeds are present and at what level. Because of visibility, start in the front lawn, then go to the side yards and finally the back yard section. Section golf courses into tees, fairways, greens and roughs for each hole. Roughs receive least attention for weed

## WINTER WEED MANAGEMENT SCHEDULE FOR WARM SEASON TURFGRASSES

### LATE SUMMER

To build root carbohydrates, apply winterizing fertilizer which supplies adequate potassium and mow at the upper recommended mowing height. Apply preemergence herbicides for annual bluegrass if scouting the previous spring warrants it. Scout and map areas with crabgrass to pinpoint herbicide needs for the following spring.

### EARLY/MID FALL

If needed, apply postemergence herbicides for annual bluegrass control.

### MID FALL

If needed, apply postemergence herbicides for broadleaf weed control.

### EARLY WINTER

Reapply postemergence herbicides for broadleaf weeds and annual bluegrass, if necessary.

### WINTER

Calibrate and repair sprayers. Evaluate the previous year's weed control strategies. Plan for the upcoming year's strategy.

### LATE WINTER

Apply preemergence herbicides for crabgrass control. Apply postemergence herbicides for broadleaf weed control for new customers.

### EARLY SPRING

Apply preemergence herbicides for goosegrass control. Repeat broadleaf weed control application, if necessary, for new customers. Follow-up scouting for remaining winter weeds for formulating the upcoming fall control strategies.

### SUMMER

Maintain optimum fertility, watering and mowing height and frequency to encourage healthy, thick turf stands which helps discourage weeds and other pests.

**ESTABLISHED SOUTHERN TURFGRASS TOLERANCE TO POSTEMERGENCE HERBICIDES  
(REFER TO HERBICIDE LABEL FOR SPECIFIC SPECIES LISTING)**

Herbicide	Bahiagrass	Bermuda-grass	Carpetgrass	Centipede-grass	St. Augustine-grass	Zoysiagrass	Overseeded Ryegrass	Tall Fescue
<i>Broadleaf Weeds</i>								
atrazine (Aatrex)	NR <sup>1</sup>	I-NR	I <sup>3</sup>	S-I	S-I	I	NR	NR
bentazon (Basagran)	S	S	S	S	S	S	S-I	S
bromoxynil (Buctril)	S	S	S	S	S	S	S	S
2,4-D	S	S	I	I	I-NR	S	S-I	S
2,4-D+dicamba	S	S	I	I	I-NR	S	S-I	S
2,4-D+2,4-DP	S	S	I	I	I-NR	S	I-NR	S
2,4-D+MCP	S	S	I	I	I-NR	S	I-NR	S
2,4-D+MCP+dicamba	S	S	I	I	I-NR	S	I-NR	S
2,4-D+MCP+2,4-DP	S	S	I	I	I-NR	S	I-NR	S
dicamba (Vanquish)	S	S	I	I	I-NR	S	I	S
MCPA+MCP+2,4-DP	S	S	I	I	I-NR	I	I-NR	S
MCP	S	S	I	I	I-NR	S	I	S
imazaquin (Image)	NR	I-S	I	NR	S	S	NR	NR
simazine (Princep T&O)	NR	I-NR	I	S-I	S-I	I	NR	NR
<i>Grass Weed Control</i>								
asulam (Asulox)	NR	S-I <sup>2</sup>	NR	NR	S-I	NR	NR	NR
diclofop (Illoxan)	NR	S	NR	NR	NR	NR	NR	NR
DSMA, MSMA	NR	S	NR	NR	NR	I	NR	I
fenoxaprop (Acclaim)	I-NR	I-NR	NR	NR	NR	I	I	NR
metribuzin (Sencor)	NR	S-I	NR	NR	NR	NR	NR	NR
pronamide (Kerb)	NR	S	NR	NR	NR	NR	NR	NR
sethoxydim (Vantage)	NR	NR	NR	S	NR	NR	NR	NR

<sup>1</sup>S=Safe at labeled rates; I=Intermediate safety, use at reduced rates; NR=Not Registered for use on and/or damages this turfgrass.

<sup>2</sup>Asulam is labeled for 'Tifway' (419) Bermudagrass and St. Augustinegrass.

<sup>3</sup>Carpetgrass tolerance to herbicides listed has not fully been explored.

These are relative rankings and depend on many factors such as environmental conditions, turfgrass vigor or health, application timing, etc., and are intended only as a guide.

control while greens and tees receive the most. Weed cover patterns can be as elaborate as estimating the percent weed cover for each unit or, more realistically, just labeling areas as widespread, spotty or in a single patch. The owner or manager of the turf site will probably determine how many weeds will be tolerated.

Begin scouting for winter weeds in early fall (September/October) with a follow-up in early spring (March/April). The fall scouting allows early detection.

**Herbicide Selection and Use**

Preemergence herbicides are applied

prior to weed seed germination and prevent development of the germinating seed. They should be activated by rainfall or irrigation after application.

Postemergence herbicides generally are effective only on visible weeds. Young (two to four-leaf stage) and actively growing weeds are the most susceptible and require least amount of herbicide. At this stage, herbicide uptake and translocation are favored and weeds have less developed, more tender root systems. Waiting later results in poorer translocation of applied materials in plants, more difficulty controlling

mature plants and possible setback of turf during green-up.

Postemergence herbicides should only be used when weeds are actively growing. This primarily occurs with temperatures between 40° and 80°F. Applications outside this temperature range are either too slow to be effective or result in excessive turf damage. **LM**