SUGGESTED WEED IDENTIFICATION GUIDES FOR TURF AND LANDSCAPE INDUSTRIES

Weeds of Southern Turfgrass

Publication Distributions Center
IFAS Building 664
P. O. Box 110011
University of Florida
Gainesville, Florida 32611
(904-392-1764)
$8.00 / Particularly useful for weeds of turf and landscapes in the Coastal Plain but appropriate for turf throughout Southeastern US. Color photographs and brief descriptions of each species.

Weeds of the Northeast

Cornell University Press
P.O. Box 6525
Ithaca, NY 14851_6525
607-277-2211
$29.95 (+ shipping) / Appropriate to the Northern tier of the US (south to North Carolina) and southern Canada. About 300 species are covered. Several color photographs and drawings for each species, descriptions, and identification keys.

Weeds of the West

University of Wyoming
U.W. Coop. Extension Service Bulletin Room
University of Wyoming
PO Box 3313
Laramie WY 82071-3313
$24.50 / A full color guide focused primarily on weeds of western US agriculture. Multiple color photos of each weed and brief descriptions are included. There is no key.

Weed ID Guide

Southern Weed Science Society
1508 West University Ave.
Champaign, IL 61821_3133
$97.00 (includes all six sets of weed sheets, index and a binder)
CD_ROM Weeds of the United States is $120 A 'high-end' and relatively expensive resource, this is available in notebook form (so it can be continually updated) and also a CD_ROM. High quality photographs with brief descriptions. No key is included.

Color Atlas of Turfgrass Weeds

Ann Arbor Press
310 North Main Street
P.O. Box 20
Chelsea Michigan 48118
800-487-2323
$79.95 (plus shipping) / A color guide to turfgrass weeds. This guide covers weeds of warm-season and cool-season areas. Several photographs of each species and brief descriptions. Control guidelines are included.

NEWSS web site

http://www.ppws.vt.edu/newss/newss.htm The Northeastern Weed Science Society web site has a listing of internet sources for weed identification guides.

How to get maximum control of summer weeds

Maximum control of summer annual weeds with preemergence herbicides can be achieved by following these basic guidelines:

1. ***Apply the product at the recommended time and rate.*** Weather varies from year to year and it may be necessary to apply earlier than normal. Reference to 30-day weather forecasts can help with this decision.

2. ***Apply the product before rain is expected or water it in with two inches of irrigation water.*** Numerous instances of poor weed control occur each year because of the lack of rain or an irrigation event within seven days of preemergence application. Additionally, irrigating-in the herbicide is an excellent method to prevent losses due to volatility and lateral herbicide leaching. Turfgrass preemergence herbicides essentially do not leach in downward direction beyond a depth of one to three inches due to binding to soil colloids and organic matter. But they can move laterally, particularly if heavy rainfall occurs shortly after application. Thus, irrigation will usually improve weed control and will help to prevent lateral movement.

3. ***Calibrate all application equipment.*** Uniform application is critical to achieving good weed control.

4. ***If fertilizer/herbicide formulations are to be used, select a product that has uniform particle size.*** Be sure the product is applied with a sufficient number of particles to ensure even, uniform application. Also, be sure that the herbicide load is sufficient to apply the recommended rate of the product. Johnson and Murphy (1993) showed that dithiopyr rates can be reduced if applied on a dry granular carrier (Table 3). However, with most other preemergence herbicides the amount of active ingredient applied per acre should be the same either for sprayable or dry formulations.

5. ***Delay mowing until after a rainfall or irrigation event.*** Studies have shown that mowing and bagging operations can remove significant quantities of a preemergence herbicide if conducted before the herbicide is moved into the soil by rain or irrigation water.

6. ***Properly maintain the turfgrass.*** Following recommended cultural practices that promote normal turfgrass growth and development will enable the turfgrass to compete with weeds. The first line of defense against weed infestations has been, and probably always will be, a thick, healthy, properly maintained turfgrass. Adherence to recommended soil fertility and pH levels, proper irrigation, controlling other pests, and mowing at the correct height and frequency will improve the effectiveness of most chemical weed control programs.