

CULTURAL PRACTICES AND HERBICIDE EFFECTIVENESS

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Turf management practices prior to and following herbicide applications can influence control. Practices which encourage a healthy, vigorous turf are a critical part of a weed control program. However, a few temporary adjustments in a turf management schedule can increase the effectiveness of herbicides during application.

1. Mowing should be avoided three days prior to application of postemergence herbicides, as well as three to five days after application. Most postemergence herbicides work through the foliage. Insufficient surface exposure of the weed to the herbicide can result in poor control. Also, if the turf foliage is removed before the herbicide has time to enter the weed's system, control is also reduced.

Preemergence herbicides act through the soil, so mowing should not affect control.

Mow frequently to the recommended height. Under most conditions mow as high as your clientele will tolerate. Try not to mow more than one third of the height of the turf at one time. Keep mower blades sharp for a neat, clean cut without tearing or pulling the turfgrass plant.

2. Cultivation and Aerification should be done before applying preemergence herbicides to control weed seed brought to the surface in the process. Do not aerify following the preemergence application. Once soil is disturbed by aerification, the effectiveness of the preemergence is reduced.

3. Withhold Irrigation for two days after applying postemergence herbicides. Irrigation following preemergence herbicide or soil insecticide applications, however, is often recommended to "water in"

the herbicide into the thatch and soil.

Normally irrigation should be deep and infrequent to encourage deep rooting. Excess moisture can lead to turf disease, shallow root systems, *Poa annua*, and algae.

4. Test Soil for minerals, pH, and bulk density. Pesticide and fertilizer effectiveness and turfgrass vigor can be reduced by poor soil. Without correction, time and money are wasted. Contact the local Extension Agent for recommended soil conditions for your area and for testing facilities. Periodically check the pH of tank mixes since the effectiveness of certain pesticides depends upon pH. Guard against compaction by traffic control or frequent aerification.

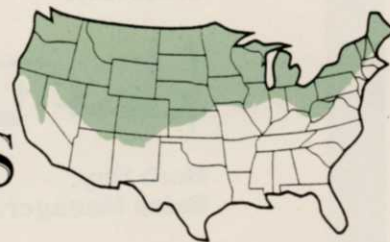
5. Apply Proper Fertilizers, but do not overfertilize. Maintain a dense turf but avoid thatch buildup with lush turf growth. Soil tests will tell you if you really need a complete fertilizer each time.

6. Control Insects and Diseases to prevent weed invasion.

7. Select Competitive Turfgrass Varieties. In the Sunbelt, Tifway for fairways and Tifgreen (328) for greens would be ideal for bermudagrass. Dwarf bermudagrasses do not afford the same competition to weeds. Tall turf-type fescues and zoysia are aggressive for the transition zone. Kentucky bluegrasses vary in aggressiveness for the North. Select one that is aggressive to prevent weed competition.

8. Control Weeds. Choose herbicides which are recommended and safe to use on your type of turfgrass. Be careful to apply them at the rates and in the manner specified on the label.

TIMING PREEMERGENTS IN COOL SEASON GRASSES



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It has long been recognized that effective control of summer annual grassy weeds can best be accomplished by using preemergence herbicides.

Proper application procedures and timing insure excellent control of a number of species (foxtails, smooth crabgrass, goosegrass, barnyardgrass) from several herbicide choices. However, many variables exist that can affect control; grass vigor, species, maturity, soil physical conditions, weather, and infestation level.