

A weed control schedule should be developed once the turfgrass area is established. Again, this will vary widely on the resources available to the superintendent, weed species present, and overall desires and goals of the individual golf club.

If weed pressure is heavy, then both pre- and post-emergence herbicides will be needed. For preemergence crabgrass control in established turf, one of the dinitroaniline herbicides or dithiopyr should be considered. These must be applied before crabgrass germinates in early spring and repeated every 90 to 120 days depending on the specific product used. Read the label directions for guidelines on repeat application timing and any precautions about overseeding timing. If broadleaf weeds are a problem along with grass weeds, isoxaben (Gallery) mixed with one of the dinitroaniline herbicides or dithiopyr will broaden the window of weed species controlled.

If goosegrass is the predominate weed species present, then oxadiazon should be the preemergence herbicide chosen. The dinitroanilines also provide goosegrass control but these are usually not as consistent as oxadiazon. Oxadiazon should also be the choice of materials used on heavy traffic areas such as par-three tees, since it affects turfgrass rooting less than the dinitroanilines. Preemergence herbicides such as bensulide, dacthal, or napropamide also provide good crabgrass control but like the dinitroanilines, are not as consistent for goosegrass control.

Preemergence annual bluegrass control on overseeded greens is provided in Florida either with pronamide or fenarimol. Since each product has specific strengths, weaknesses and restrictions, the superintendent should research each product before using it. Besides pronamide or fenarimol, preemergence annual bluegrass control in overseeded fairways is available with benefin or bensulide. However, timing of this application in conjunction with overseeding is important. The label should be consulted for specific information before using any herbicide. Selective postemergence annual bluegrass control in an overseeded situation is not currently available in Florida.

Preemergence annual bluegrass control in non-overseeded areas is achieved with the same herbicides used for preemergence crabgrass control. Isoxaben can be added to this list to provide better winter annual broadleaf weed control.

Preemergence and early postemergence annual bluegrass control in non-overseeded bermudagrass fairways is also provided by pronamide (Kerb) or simazine (Princep T&O). Either material should be applied in November and repeated in early January. Besides annual bluegrass, simazine will also control many winter broadleaf weeds. Do not use simazine during bermudagrass spring transition or if temporary yellowing to the bermudagrass can not be tolerated.

If nutsedge, specifically yellow nutsedge or annual (water) sedge, is a problem in fairways, preemergence control is available with metolachlor (Pennant). Metolachlor also provides some annual grass and broadleaf weed control but consult the label for specific weed control activity.

Perennial ryegrass clump control involves sanitation practices and herbicide use. Minimize seed drift by seeding when winds are calm, clean shoes and equipment before exiting seeded areas, and do not water excessively as to wash seed. Apply a preemergence herbicide such as pendimethalin, oryzalin, dithiopyr, or prodiamine on surrounding areas immediately before or after overseeding. A repeat application may be necessary at one-half rate in January for full season control.

POSTEMERGENCE HERBICIDES

If weed pressures are heavy or preemergence herbicide applications are not timed properly, some weed escape can be expected. Cultural control involves proper mowing to discourage weed seedhead formation, thus preventing further sources of weeds and the proper timing and use of postemergence herbicides.

The phenoxy herbicides (2,4-D, 2,4-DP, MCPP, MCPA) alone, or combined with the benzoic herbicides (e.g., dicamba) have traditionally been used to control broadleaf weeds. As weeds mature, repeat applications every seven to fourteen days are required for complete weed control, but often results in varying degrees of turf phytotoxicity. The introduction of much more active materials such as triclopyr or metsulfuron reduce the number of applications needed, thus reducing the potential of turf damage.

Postemergence grass weed control has traditionally been attempted with single and sequential applications of the arsenical herbicides (MSMA and DSMA). Metribuzin (Sencor) is often combined with these to reduce the number of