Must be watered off the leaf surface of the turf.

2. Pendulum WDG: Applied late April or early May at 2.5 pounds per acre and followed by 2.0 lbs. per acre applied in June or July as a split application to extend weed control.

3. Barricade 65 WG: Applied in October to all non-overseeded areas to control winter annuals and tracked-out ryegrass. Applied at 2 pounds, per acre.

Post-emergent Programs
No pre-emergent program will provide 100% control. We treat emergent weeds with the following materials.

1. Yellow nutsedge: Basagran T/O at 3 pints per acre.
2. Purple nutsedge: Manage at 1 oz per acre.
3. Bull paspalum: Tank mix of 2 qt/acre MSMA with Sencor 75 Turf at 2 tsp./acre with a good spreader/sticker. Mix and spray every 7-10 days until control is reached.
4. Goosegrass: Illoxan 3 EC at 1.0 oz/1000 sq. ft.
5. Broadleafs (winter annuals): Lesco Three-Way (2,4-D, Mecoprop and Dicamba) at 1.2 to 1.5 oz/1000 sq. ft.

Mechanical/hand pulling of weeds
We hand-pull all weeds in the putting surfaces (except the nutsedges. See above). All weeds in flower beds are also hand pulled.

Wall-to-wall vs. Spot Spraying
Most all of our pre-emerge programs are treated on a wall-to-wall basis, except the fall application, which is used to treat only the non-overseeded areas. All of our post-emergent programs are applied as spot treatments to only treat the actual weed infested areas to minimize chemical use and environmental impact.

Summary
After the last several years with properly applied pre-emergent programs we have reduced our chemical weed control to now less than 10% of our total turf acres. This effort is assisted by increasing our renovation activities and fertility programs to grow the healthiest turfgrass possible, which minimizes weed growth.

Our major weed problems now seem to be purple nutsedge and bull paspalum. Their waxy leaf surfaces tend to resist the penetration by the herbicides, and our summer rains make it hard to keep an active product on the plant. Unfortunately, it seems our pre-emergent programs have a minimal effect on these weeds.

CARYN. CGCS
Renaissance Vinoy Resort

Weed Control for 2 Municipal Courses in Fort Myers

Working with superintendents Ed Stalnos at the Ft. Myers CC and Jim Hahn at the Eastwood GC, this is the program we came up with for the two municipal courses for this year.

Pre-emergent Program
We apply a 13-6-18 fairway fertilizer sparged with Barricade at the rate of 350 pounds per acre. This provides .75 pounds active ingredient of Barricade per acre. This is put down during the first week of November.

We follow up with either another 1.5 pounds per acre of Barricade or 1.5 quarts per acre of Sunfllan 75 to 90 days after the initial treatment. Our primary weed targets with this application is suppression of goosegrass and crabgrass germination. We also hope to slow down some of the Poa annua. If we get volunteer ryegrass coming up in non-seeded areas we spot treat with Kerb as a post-emergent application.

Post Emergent Program
For goosegrass and crabgrass infestations we use Sencor at 3 oz per acre with MSMA at 43 fluid ounces per acre as a tank mix with good results. Illoxan at a rate of 1 quart per acre has been used on Tifdwarf putting surfaces for goosegrass control. The greens are only sprayed if hand-picking cannot control the goosegrass.

Broadleaf weeds are controlled using Trimec Classic at a 1/2 quart per acre rate. We have been very successful controlling purple nutsedge by applying Manage at 1.3 ounces per acre.

We have also had good results using the new herbicide Drive making two applications at the label rate.

Our most difficult weeds are goosegrass and a broadleaf weed called southern sida. If anyone has any ideas on control of the latter, please give me a call.

MIKE MONGOVEN, CGCS
City of Fort Myers

New Product
Dow AgroSciences has recently received registration for Lontrel Turf & Ornamental herbicide in the state of Florida. Lontrel is a non-phenoxo, selective post-emergence herbicide that contains the active ingredient clopyralid. It is labeled for use on both warm and cool season turf and sod farms. Clover, thistles, and nightshade groundsel are among the weeds that are on the label with the expectation to expand it in the coming year. There is excellent turf safety with both St. Augustinegrass and bermudagrass. Lontrel may be applied as a broadcast or spot treatment.

DR. PHIL BUSEY'S TURFTALK DIGEST

Questionable spot treatment
Often I see herbicidal spot treatment of goosegrass causing considerable damage to fairways, more than a properly calibrated broadcast application of traditional selective products. I described this in an article in the September 1999 Golf Course Management, and some examples are illustrated at http://www.floridaturf.com/weeds/eleusine.html

I am interested in collecting comparative data on costs, both in materials and labor, of booming vs. spot treating. I am also interested in what threshold of goosegrass infestation is used to decide between the two approaches. Please share any experiences.

Tropical Signalgrass
I've struggled for over a year talking about "that weed everyone's got" so now