SUMMARY:

New selective herbicide options for rough bluegrass control

DATA:

Summer 2002 and 2003 studies on several cultivars of *Poatrivialis* and creeping bentgrass in West Lafayette, Ind. Studies to be expanded in 2004.

SOURCE:

Dr. Zac Reicher, turfgrass Extension specialist, Purdue University

MORE INFORMATION:

www.agry.purdue.edu/turf (under annual research reports), or zreicher@purdue.edu

New control for Poa trivialis

that already have Poa trivialis and those that will eventually get it. To find solutions to this significant golf course problem a number of compounds are being tested to determine control.

Poa trivialis is often confused with Poa annua, but the difference is important because controls for one do not always work for the other. The following are keys to differentiate the two: Poa trivialis is a gasoline or metallic green in color, goes dormant in the summer and has no visible seed heads. In contrast, Poa annua is an apple green, dies in the summer, and seed heads will be visible.

Field tests were conducted in the summers of 2002 and 2003 for control of *Poa trivialis*. The most promising compound was Battalion, a Monsanto product with the active ingredient sulfosulfuron. Over the course of the summer of 2002, Battalion gave more than 70 percent control.

The next two most positive controls in 2002 tests were TranXit, by Griffin, with the active ingredient, rimsulfuron, which gave 65 percent control; and a single application of Roundup Pro which gave 60 percent control.

Results in 2003 were disappointing due to record rainfall and very cool weather. In these tests Battalion still gave the most effective control, but the control level was only half the 2002 control level, and that was

achieved only after using a 2X rate from the year before. Another factor being investigated is the possible effect of the grass cultivars.

While Battalion is already a registered and labeled product, the manufacturer is delaying commercial sales until further field tests have been done regarding rates, timing and evaluation of a number of other grassy weeds. This summer field tests with Battalion will be done at more than 50 cooperating golf courses. In addition to control of *Poa trivialis*, the evaluations will include control of yellow nutsedge, tall fescue, quack grass and several other grassy weeds. Battalion has not been shown to be effective on established *Poa annua*.

Field tests to date indicate the following program has been the most effective for Battalion: Four-plus applications at 0.02/LB per Al applied at two-week intervals. Three-week intervals could be used if there is concern about turf safety for bentgrasses. There is slight phytotoxicity that must be tolerated, and the reduction of *Poa trivialis* will be gradual. Timing of applications could begin in late April or early May and continue through mid-June.

The active ingredient is also very active on creeping bentgrass in cool weather, such as applications done in mid-October.

Overseeding with creeping bentgrass can begin three weeks after final application, which would enable seeding to begin in August.

(continued from page 54)

above locations, twenty-nine entries finished in the top statistical grouping (see www.ntep.org/data/kb00/kb00_02-1/kb0002t01.txt). This first year of data showed some trends and some cultivars to watch, but is not enough information to make an informed cultivar decision.

Data from 2002 showed more cultivar separation as all entries were well-established and mature turf stands. Only eleven entries fell into the top statistical grouping in 2002 turfgrass quality data with the commercial cultivar 'Bedazzled' and the experimental entry 'PP H 6366' tied at the top (rating = 6.2) averaged over eight locations (see www.ntep.org/data/kb00/kb00_03-2/kb0003t01.txt).

The top statistical group also included 'Impact', 'Princeton 105', 'Award', J-1838', 'Langara', 'Midnight II', 'North Star', 'Nu Destiny' and 'Serene' (see Table 1). Only six entries finished in the top statistical group for turfgrass quality averaged over both years of the low-cut trial locations (see Table 2). This trial will continue through 2005, and 2003 data will be released this spring. Consider at least three years of data before making cultivar decisions.

TABLE 1.

Mean turfgrass quality ratings of Kentucky Bluegrass cultivars grown at eight locations in the U.S.

| Cultivar Name | Turf Quality Data Mean of 2002 (1-9 Scale; 9=Ideal Turf) | | |
|---|--|-------------|-------------------|
| Bedazzled PP H 6366 Impact Princeton 105 Award J-1838 | 6.2 6.2 6.1 6.1 6.1 6.1 6.0 | | |
| | | Langara | |
| | | Midnight II | 6.0 |
| | | North Star | 6.0 |
| | | Nu Destiny | 6.0 6.0 0.2 |
| | | Serene | |
| LSD Value | | | |