



Tips from Dr. Martin's Research at Clemson University

1. In my trials and experience and in review of available data from other trials over the years, Rubigan is clearly the best of the fungicides available (registered) for SDS. We have also gotten some good results from Eagle (2 applications at 1.2 ounces per 1,000 square feet) and Dr. Lane Tredway has gotten some very good results from Banner Maxx. We have seen less effective results from Heritage, although it has some activity.

2. We've seen some problems in newer greens and even older ones where Rubigan was not used for *Poa annua* control. On several golf courses in SC in the Midland area, Eagle was applied instead of Rubigan, and control was not adequate. Until we know more, those superintendents are more than likely going back to Rubigan for *Poa annua* preventive control and SDS control.

3. Concerning application timing, it appears that timing for *Poa* control in greens is providing good SDS control. There also is a rate issue, as 12 ounces per 1,000 square feet is being applied as either 6+6 or 4+4+4, with the last 30 days out of overseeding with *Poa annua*. I designed an experiment that is underway in Argentina, where they had very similar problems with SDS. So far in that trial, 2 or 3 applications of Rubigan is the best treatment, with 2 (but not one) applications of Eagle also looking good.

4. Generally, regarding application timing, I have recommended having treatments all done at least 30 days prior to the bermudagrass going dormant (the first hard frost), which would be about mid-September to mid-October.

5. I have a new student, Eric Luc that is working on SDS, primarily in putting greens.

Stay tuned for more information on this important issue.

This regional update, and others written by the Green Section staff, may be found on the USGA Web site at: http://www.usga.org/turf/regional_updates/regional_updates.asp

The Latest Information on Spring Dead Spot Suppression

by Chris Hartwiger & Patrick O'Brien

Spring dead spot (SDS) fungus is a major disease concern of bermudagrass areas in most areas of the Southeast Region. All popular hybrid bermudagrass varieties used in the Southeast Region are highly susceptible to this pathogen. Three causal agents (*Ophiosphaerella korrae*, *O. herpotricha*, and *O. narmari*) have been identified. In the Carolinas, the primary causal agent appears to be *Ophiosphaerella korrae* based on isolation tests at both NCSU and Clemson. The large dead areas caused by this soil borne fungus initially appear in the mid- to late-spring at the onset of bermudagrass leaf tissue green-up. The diseased areas are usually slow to heal and their impact on the course presentation can be significant. In most cases, the disease symptoms usually appear at the same playing areas each year. Few management strategies are known that seem to reduce the fungus activity. Several fungicides are labeled for control at this time, but their use is limited due to high costs and inconsistency.

State plant pathologists at NCSU and Clemson have been conducting research for many years on how to best use the fungicides available on the market. Here is a summary on their latest recommendations:

Tips from Dr. Tredway's Research at NCSU

1. In our trials, Rubigan has been most effective for spring dead spot control. We did a trial this year to look at different rates and found no difference between 6 ounces, 8 ounces, or 12 total ounces per 1,000 square feet – each rate gave about 50% control in the first year of application. From what we have seen, Banner Maxx is the second best product for SDS control, followed by Eagle and Heritage.

2. We have found that applications between August 15 and October 15 in Raleigh are equally effective. This corresponds to mean daily soil temperatures between 60 and 80 degrees. I suspect that it is most important to get the fungicide down and translocated in the plant before dormancy.

3. Spring dead spot control can be improved by watering treatments in with 0.25 inches immediately after application or applying in a high volume of water (5 gallons per 1000).