Superficial Fairy Rings Not Caused by Benomyl

Superficial fairy rings (SFR) in turf are caused by thatch-inhabiting basidiomycetes. Superficial fairy rings appear as white patches or circles ranging from 4 inches to 3 feet in diameter. It was originally reported that SFR appeared only on areas previously treated with benomyl. Researchers at the University of Maryland have found that this is not true. In fact, they found SFR occuring on new greens and tees that had never received a fungicide application. They also reported that the growth of SFR fungi was not enhanced by the presence of benomyl in agar. While it is possible that certain species of SFR fungi may be stimulated by fungicides, this study did not find any evidence of it.

(From: Kackley, K.E., P.H. Dernoeden, and A.P. Grybauskas. 1989. "Effect of fungicides on the occurence and growth in vitro of basidiomycetes associated with superficial fairy rings in creeping bentgrass." (*Plant Disease* 73:127-130.)

Use Care With Herbicides on New Sod

Preemergence and postemergence herbicides are commonly used to control annual weeds during production and after establishment of grass sod. Herbicides have the potential, however, of delaying establishment by inhibiting rooting. Researchers at Iowa State looked at bensulide, Dacthal, and pendimethalin applied at the time of sod installation, and fenoxyprop (Acclaim) applied prior to harvest and after establishment. Fenoxyprop applied at 5.6 oz a.i. per acre caused injury on three of four application dates. Fenoxyprop applied at 2.8 oz a.i. per acre discolored turf when applied 14 days before harvest. None of the treatments, including the preemergence herbicides, affected rooting when measured 4 or 8 weeks after sod installation.

(From: Reicher, Z. J. and N. E. Christians. 1989. "Establishment of Kentucky bluegrass sod following application of herbicides." (*HortScience* 24:799-801.)

Bentgrass Does Need Phosphorus

The fear of encouraging annual bluegrass on golf course turf has led superintendents to use less, or even eliminate phosphorus from their fertility program. A study recently published demonstrated the importance of phosphorus on high sand based greens. Researchers in Colorado found a dramaticimprovement in quality as phosphorus levels were increased from 0 to about 4 oz P_2O_5 per growing month. There was no benefit at rates beyond this. The researchers also reported no visual benefit from potassium in this test, but qualified this by stating the turf had never really been stressed during the test. (From: Fry, J. D., M. A. Harivandi, and D.D. Minner. 1989. "Creeping bentgrass response to P and K on a sand medium." (HortScience 24:623-624.)

Mow It Soon

Annual ryegrass is sometimes used in seed mixtures to provide soil stabilization, this due to its extreme seedling vigor. The use of annual ryegrass has been discouraged, however, because of its undesireable qualities (coarse texture, pale color, short-lived). Researchers at Oklahoma investigated means of using annual ryegrass in a mixture with tall fescue to provide soil stabilization, but to minimize its competitiveness. They looked at the effect of mowing height and timing after emergence. Using a 4:1 fescue to ryegrass mixture, waiting 6 weeks after emergence to mow the area favored annual ryegrass. Tall fescue was favored by a single close clipping (2.5 inches) 0 to 3 days after ryegrass emergence. This initial clipping reduced ryegrass ground cover at 60 days from 80% ryegrass to as little as 46%. EDITORS NOTE: The practice of planting annual ryegrass in mixtures should be limited to areas prone to erosion/washout.

(From: Brede, A. D. and J. L. Brede. 1989. "Establishment of Tall Fescue and Companion Annual Ryegrass". (*Agronomy Journal* 80:27-30.)



A review of current journal articles

