## SUPPORT YOUR ADVERTISERS

IF IT WERE NOT FOR THEM, THERE WOULD BE NO BULL SHEET.







Optional Dump Box

Quick and Easy No Tearing Deep Penetration Low Maintenance Close Hole Spacing

ROSEMAN TRACTOR EQUIPMENT CO. 2620 Crawford Ave., Evanston, IL 60201 312 - 864-1842

## Gaeumannomyces Patches in Michigan

by J. M. Vargas, Turfgrass Pathologist

Gaeumannomyces patch or "take all disease" (formerly known as **Ophiobolus** patch) is becoming a problem in Michigan. The disease have been a problem for many years in the Pacific Northwest and most people believed it was confined to this area of the country. In the past few seasons it has been reported on the East coast and we have found it in many states in the mid-west.

The disease attacks both creeping bentgrass and annual bluegrass greens and annual bluegrass fairways. On creeping bentgrass the disease first appears as faded straw colored patches or circles. Later the plants in the circle become purple in color resembling a phosphorus deficiency. On annual bluegrass the patches or circles appear yellow in color. Usually a brilliant yellow at first and a more bronze-yellow later. Anthracnose is often found on the foliage of senescing plants in the outer circle. However, it should be remembered that anthracnose is a disease characterized by a general thinning and **Gaeumannomyces** patch as the name implies is a disease that forms patches or circles. The reason I point this out is some people were confusing the two diseases this summer.

The Gaeumannomyces fungus primarily attacks the roots and the crowns of the plants. In addition to being internal in the crowns and roots it also produces runner hyphae which grown down the outside of the root. These structures can be seen with a hand lens or lower power scope. They appear as dark hairylike strands running parallel along the root surface. Because the fungus is internal and confined primarily to the roots and crowns effective chemical management may be difficult to achieve.

We have no fungicide recommendations at this time. Superintendents have reported varying degrees of success with 8 oz. of Tersan 1991, 8 oz. of Daconil 2787 and 4 oz. of Chipco 26019. I would suggest you apply these three fungicides to a test area on your golf course to see which, if any, work best for you. The Tersan 1991 and Daconil 2787 should probably be drenched into the turf.

Credit - Patch of Green, 3/84

## **Certified Seed Redemption Program**

Turf Seed Inc. will donate \$0.50 to the Illinois Turfgrass Foundation for each blue tag from a 50 lb. bag of certified seed of their varieties that the ITF collects. The purpose of this program is to encourage the use of certified seed and to promote turfgrass research. The varieties covered by the program are listed below. Please send your tags to the ITF office, P.O. Box 501, Urbana, Ill. 61801. Also, please let others know about this program so that their tags can be saved.

uns program	i so mat men taga	s can be saved.	
Kentucky bluegrass varieties		Fine fe	escue varieties
Challenger			Aurora
Columbia			Waldina
Midnight			Shadow
Shasta			Flyer
Perennial ryegrass varieties			Fortress
Birdie	Manhattan	Tall fe	escue varieties
Birdie II	Manhattan II		Apache
Citation	Omega		Falcon
Citation II			Olympic
CBS		Creeping bentgrass varieties	
CBS II		Penneagle	Penncross