Whereas summer patch disease pressure was light at Dearborn, it failed to develop at all in the Grand Rapids study, hence, no summer patch data was obtained from this study this year. Dollar spot (*Lanzia sp., Moellerodiscus sp.*), however, moved aggressively and uniformly into the study and two ratings (mid-late summer) are included in this report. As Table 4 indicates, at approximately 3 months after the last application, some products, such as SAN 619, Banner, Bayleton, Chipco 26019, and Lesco 017530 were still controlling dollar spot quite effectively.

Dollar Spot Fungicide Trial - 1990

## Hancock Turfgrass Research Center, MSU, East Lansing, MI

The 1990 dollar spot (*Moellerodiscus sp., Lanzia sp.*) fungicide trial was conducted on an irrigated Emerald creeping bentgrass (*Agrostis palustris huds*) putting green at the Hancock Turfgrass Research Center on the MSU campus. The green was maintained at  $\frac{1}{4}$ " height of cut and fertilized at 3/8 lb N/Mo. Treatments were applied curatively to 3' x 6' plots in three replications of a random block design on 7, 10, 14, 21 and 28 day schedules as indicated on the data tables. The initial treatments were applied on August 17, 1990. By the end of the study, weekly treatments had been applied 7 times, 10-day treatments were applied 4 times, 14 day treatments were applied 4 times, 21 day treatment were applied 3 times, and 28 day treatments were applied twice.

Disease pressure was moderate this year, reaching a peak for the season around September 20 when the enclosed rating (Table 5) was taken. As the data indicates, all treatments gave significant control of dollar spot, compared to the controls. Many standard and experimental compounds gave complete control of the disease but Fungo and the fertilizer treatments were least effective. It should be noted that the dollar spot strain in this plot area is resistant to the benzimidazole fungicides, such as Fungo.

To phytotoxicity was noted in this study although a "greening effect" was observed in some treatment plots as noted on data Table 5.

Yellow Tuft Fungicide Trial - 1990

## Hancock Turfgrass Research Center, MSU, East Lansing, MI

The 1990 yellow tuft (*Sclerophthora macrospora*) fungicide study was conducted on an irrigated Penneagle creeping bentgrass putting green at the Hancock Turfgrass Research Center on the MSU campus. Foliar treatments were applied preventively to 6' X 6' plots in three replications of a random block design.

Initial applications were made on May 24, 1990 with subsequent applications being made at 14 and 21 day intervals through Sept. 28.

Disease pressure was light this year but it peaked around the time of the August 22 rating. As Table 6 indicates, both Subdue and Aliette gave significant control of the disease compared to the control. Aliette at the 8 oz. rate was mildly phytotoxic to the bentgrass from approximately day 3 to day 10 following each application throughout the season.

## Table 5. Dollar Spot Fungicide Study - 1990

Rating date - 9/20/90										
Treatment	Rate/1000 ft. <sup>2b</sup>	Interval	I	П	III	AVE	DMR <sup>G</sup>			
Chipco 26019	4 fl oz	21 day	0_~~	0	0	0	Е			
SAN 619F	1.89 gm ai	21 day	$_0^0 GG$	$_{0}^{0}G$	$0^G$	0	E			
Dac 2787	6 fl oz	10 day	0	0	0	0	E			
ASC 66518-X-A	4.2 oz	10 day	0	0	0	0	E			
ASC 66518-X-B	4.2 oz	10 day	0	0	0	0	E			
ASC 66518-X-C	3.8 oz	10 day	0	0	0	0	E			
ASC 66518-X-D	3.8 oz	10 day	0	0	0	0	E			
ASC 66608	5 oz	10 day	0	0	0	0	Е			
ASC 66608	7.5 oz	10 day	$0^G$	$_0^0 G$	$_0^0 G$	0	E			
ASC 66900	4 oz	10 day	0	0	0	0	E			
ASC 66811	.015 oz ai	14 day	0	0	0	0	E			
ASC 66811	.03 oz ai	21 day	0	0	0	0	E			
Daconil 2787 (DG)	3.5 oz	10 day	0	0	0	0	Е			
ASC 66617	.2 fl oz	14 day	0	0	0	0	E			
ASC 66617	.4 fl oz	14 day	0	0	0	0	E			
Vorlan (W) + Fungo (W) Pre-mix	2 oz	21 day	0	0	0	0	Е			
Vorlan (W) + Fungo (W) Pre-mix	4 oz	21 day	0	0	0	0	Е			
Banner	4 fl oz	30 day	$0^{GG}$	$0^{GG}$	$0^G$	0	Е			
Daconil 2787	6 fl oz	14 day	0	0	0	0	E			
Rubigan	2 fl oz	21 day - 2	$_0^0 GG$	0	$_{0}^{0}G$	0	E			
		apps. only			U	U	L			
Rubigan	8 fl oz	1 app only	$0^G$	$_{0}G$	0	0	E			
Bayleton	2 oz	30 day	0	0	0	0	E			
Banner	2 fl oz	30 day	$_0^0 G$	$_0^0 G$	$_0^0 G$	0	E			
Turf Restore + Dac 2787	.5  lb N + 6  fl oz	30day+14day	0	0	0	0	E			
Urea $+$ Dac 2787	.5 lb N + 6 fl oz	30day±14day	0	0	0	0	F			
Lesco 017530	3 lb	30day+14day		0	0	0	E			
Lesco "Twosome"	3 fl oz	28 day 21 day	${}^0_0G$	${}^0_0G$	${}^0_0G$	0	E			
Vorlan (F)	2 fl oz		0	0		0	E			
SAN 619F		21 day	${}_{0}^{0}G$	${}_{0}^{0}G$	${}^0_0G$	0	E			
SAN 619F	1.89 gm ai	28 day	${}_{0}^{0}G$	${}_{0}^{0}G$	${}_{0}^{0}G$	0	E			
Vorlan (F) +	2.84 gm ai 1 fl oz + 1 fl oz	28 day 21 day	0	0	0	0 0	E E			
Fungo (F) Vorlan (F) + Fungo (F)	2 fl oz + 2 fl oz	21 day	0	0	0	0	E			

## Hancock Turfgrass Research Center Michigan State University, E. Lansing, MI Rating scale: 0 (no disease), 10 (plot totally diseased) Rating date - 9/20/90

Treatment <sup>C</sup>	Rate/1000 ft. <sup>2b</sup>	Interval	Ι	Π	III	AVE	DMR <sup>G</sup>
			C	G	G		
SAN 619 F	1.42 gm ai	21 day	$0^G$	$0^G$	$0^G$	0	E
Banner	4 gm ai	7 day	$_0^G$	$_{0}^{\circ}G$	$0^G$	0	E
Terraguard	6 oz	21 day -2 apps only	1	0	0	.3	Е
Terraguard	4 oz	21 day - 2 apps only	1	0	1	.7	DE
Rubigan	1.5 fl oz	28 day	1	1	1	1	DE
Daconil 2787 (DG)	1.7 oz	10 day	1	1	1	1	DE
Terraguard	8 oz	1 app only	1	1	3	1.3	CD
Terraguard	2 oz	21 day	1	2	4	2.3	B
Urea	.5 lb N	30 day	$2^G$	2 3	$3^G$	2.7	B
Turf Restore (greens grade)	.5 lb N	30 day	2	3	3	2.7	B
Fungo	2 fl oz	21 day	3	2	3	2.7	В
Control		5	3	2 3	8	4.7	Ā

Table 5. Dollar Spot Fungicide Study - 1990 (cont.)

<sup>a</sup>5% level of significance.
<sup>b</sup>Rates listed as formulation unless listed as "ai" (active ingredient).
<sup>c</sup>Blanked out treatments are proprietary.
<sup>G</sup>Mild greening effect.
<sup>GG</sup>Moderate greening effect.
<sup>GGG</sup>Severe greening effect.