

Kentucky Bluegrass Melting-Out Fungicide Study - 1990

Hancock Turfgrass Research Center

The 1990 melting-out (*Dreschlera poae*) fungicide trial was conducted at the Hancock Turfgrass Research Center on the MSU campus at East Lansing, MI, on irrigated Kenblue Kentucky bluegrass (*Poa pratensis*) turf maintained at 1½" height of cut. The study was set up in three replications of a random block design with a 3' x 6' plot size. All treatments were applied with a CO₂ small-plot sprayer at 30 PSI and a volume of 48 gal/A. The plot area was fertilized dormant in 1989 (fall) and at the rate of ¼# N/1000 ft² on May 25, 1990 and June 6, 1990.

Treatments were applied preventively on May 9, with subsequent treatments being applied at 14 and 21 day intervals as indicated on the data table (Table 2). Disease pressure was mild this year, with the controls exhibiting approximately 43% of maximum disease levels.

As the data indicates (Table 2), a number of standard fungicides (Vorlan, Chipco 26019) and experimental fungicides (CGA-455, Pace) exhibited excellent disease control this year. Most treatments gave significant disease control compared to the untreated control plots.

Summer Patch Fungicide Study #1 - 1990

Dearborn Country Club, Dearborn, MI

The summer patch fungicide study at Dearborn Country Club was initiated preventively on April 30, 1990 (except as noted on data tables). A second application was made on May 30, 1990 (except as noted on data table). Treatments were foliarly applied (sprayed) or sprayed and then drenched into the root zone as requested in the protocols.

The disease pressure was very light this year due to a relatively cool, moist summer. Early season yellowing caused by the summer patch pathogen faded in and out during the summer, but resulted in only mild thinning of the turf. In a typically stressful July-August period, these chlorotic areas would have thinned drastically.

On September 15, disease pressure peaked for the season and the study was rated (Table 3). As the data indicates, statistical significance between treatments was limited by low disease pressure and variability within treatments.

Phytotoxicity was first documented on June 25, following the second application on May 30. The SAN 619 (.66 oz) treatment created a dark green turf with some undesirable leaf necrosis. This effect persisted throughout the season and is reported in the September 15 rating table. The lower rate of SAN 619 (.33 oz), however, caused a dark green turf which was aesthetically acceptable, without the necrosis observed at the higher rate. Unfortunately, low levels of disease in the controls reduced statistically significant differences in disease control among the various treatments.

Summer Patch Fungicide Study #2 - 1990

Highland Golf Club, Grand Rapids, MI

The summer patch fungicide study at Highland Golf Club was initiated preventively on May 2, 1990 (except as noted on data tables). A second application was made on May 31, 1990 (except as noted on data tables). Treatments were either applied foliarly (sprayed) or sprayed and then drenched into the soil, as requested in the research protocols.

Table 3. Summer Patch Fungicide Study - 1990

Dearborn Country Club, Dearborn, MI
Rated 9/15/90 - Percent plot area infected

Treatment	Rate/1000 ft ^{2b}	Applic. interval (dates)	I	II	III	AVE	DMR ^d
SAN 619F	.66 oz	65°+30 days (4/30,5/30)	0 ^{GG}	0 ^{GG}	0 ^G	0	C
SAN 619F	.33 oz	65°+30 days (4/30,5/30)	0 ^G	0 ^G	0 ^G	0	C
Rubigan ^d	8 fl oz	65° only (4/30,5/30)	0	0 ^G	0 ^G	0	C
Lynx (F)+X-77	1 fl oz+.06%v/v	75°+30 days (6/19,7/17)	0	0	0 ^G	0	C
Rubigan ^d	4 fl oz	65°+30 days (4/30,5/30)	0	0	0	0	C
Lynx (EC)	1.67 fl oz	65°+30 days (4/30,5/30)	0	0	0	0	C
Terraguard	6 oz	--- (5/30,6/25)	0	0	0	0	C
Banner	4 fl oz	65°+30 days (4/30,5/30)	0	1	0	.3	C
Rubigan ^d	2 fl oz	65° only (4/30)	0	1	1 ^G	.7	C
Lynx (DF) + X-77	1 oz + .06% v/v	65°+30 days (4/30,5/30)	1	1	0	.7	C
Lynx (DF) + X-77	1 oz + .06% v/v	75°+30 days (6/19,7/17)	1	0	1	.7	C
Banner ^d	4 fl oz	65°+30 days (4/30,5/30)	1	1	0	.7	C
Lynx (EC)	1.67 fl oz	75°+30 days (6/19,7/17)	0 ^G	1	2	1	C
Banner	4 fl oz	75°+30 days (6/19,7/17)	2	1	0 ^G	1	C
Lesco 017530	6 lb	65°+30 days (5/17,5/30)	2	1	0	1	C
ASC-66811	.015 oz ai	65°+30 days (4/30,5/30)	2	0	1	1	C
Terraguard	4 oz	--- (5/30,6/25)	2	0	1	1	C
Terraguard	8 oz	once only (5/30)	3	0	0	1	C

Table 3. Summer Patch Fungicide Study - 1990 (cont.)

Treatment	Rate/1000 ft ^{2b}	Applic. interval (dates)	I	II	III	AVE	DMR ^d
Rubigan ^d	2 fl oz	65°+30 days (4/30,5/30)	0	1	3	1.3	C
Rubigan ^d	4 fl oz	65° only (4/30)	1	3	0	1.3	C
Rubigan ^d	4 oz	75°+30 days (6/19,7/17)	5	1	0	2	BC
Ch.26019	4 fl oz	--- (7/17,8/15)	1	0	5	2	BC
Lynx (F) + X-77	1 fl oz + .06% v/v	65°+30 days (5/7,5/30)	0 ^G	5	2	2.3	BC
Banner	4 fl oz	75° only (6/19)	7	0	0	2.3	BC
Terraguard	2 oz	--- (5/30,6/25)	3	5	0	2.7	ABC
Ch.26019	8 fl oz	--- (7/17,8/15)	5	1	2	2.7	ABC
Bayleton	2 oz	75° only (6/19)	3	5	1	3	ABC
Ch.26019	8 fl oz	65°+30 days (4/30,5/30)	2	1	7	3.3	ABC
Bayleton	2 oz	65°+30 days (4/30,5/30)	10	2	0 ^G	4	ABC
Vorlan	2 fl oz	65°+30 days (5/7,5/30)	10	1	1	4	ABC
Bayleton	2 oz	75°+30 days (6/19,7/17)	10	0	2	4	ABC
ASC-66811	.06 oz ai	65°+30 days (4/30,5/30)	7	3	2	4	ABC
Lesco "Twosome"	8.8 fl oz	65°+30 days (5/7,5/30)	5	7	1	4.3	ABC
ASC-66617	2 fl oz	65°+30 days (4/30,5/30)	10	2	1	4.3	ABC
Banner	16 gm ai	65° only (4/30)	15	7	1	2.7	ABC
Lesco "Twosome"	4.4 fl oz	65°+30 days (5/7,5/30)	20	2	1	7.7	ABC
Ch.26019 + Banner	4 fl oz + 2 fl oz	65°+30 days (4/30,5/30)	1	2	20	7.7	ABC
Ch.26019 + Rubigan	4 fl oz + 2 fl oz	65°+30 days (4/30,5/30)	20	5	1	8.7	ABC

Table 3. Summer Patch Fungicide Study - 1990 (cont.)

Treatment	Rate/1000 ft ^{2b}	Applic. interval (dates)	I	II	III	AVE	DMR ^d
ASC-66811	.03 oz ai	65°+30 days (4/30,5/30)	7	20	1	9.3	ABC
Control	---	---	10	10	10	10	ABC
Vorlan + Fungo	1 fl oz + 1 fl oz	65°+30 days (5/7,5/30)	0	7	25	10.7	ABC
ASC-66617	.4 fl oz	65°+30 days (4/30,5/30)	30	2	0	10.7	ABC
Vorlan + Fungo	2 fl oz + 2 fl oz	65°+30 days (5/7,5/30)	20	10	3	11	ABC
ASC-66791	6 oz	65°+30 days (4/30,5/30)	35	2	0	12.3	ABC
CGA-455	28 gm ai	65°+30 days (4/30,5/30)	20	15	3	12.7	ABC
RH-3866	.5 oz ai	65°+30 days (4/30,5/30)	2	10	30	14	ABC
Bayleton	2 oz	65° only (4/30)	35	10	0	15	ABC
Ch.26019	4 fl oz	65°+30 days (4/30,5/30)	25	5	20	16.7	AB
ASC-66791	8 oz	65°+30 days (4/30,5/30)	25	15	10	16.7	AB
Rubigan ^d	4 oz	75° only (6/19)	1	50	1	17.3	A

^a5% level of significance.

^bRates listed are formulation unless listed as "ai" (active ingredient).

^cBlanked-out treatments are proprietary.

^dTreatments drenched in after spraying.