

PREVENTATIVE SUMMER PATCH STUDY, 1987
ORCHARD LAKE COUNTRY CLUB

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In May 1987 a preventative study was established at Orchard Lake Country Club, Orchard Lake, Michigan. This section of unshaded annual bluegrass (*Poa annua*) fairway had a history of severe summer patch (*Phialophora graminis*). This area was irrigated with an automatic sprinkler system and was syringed during the hottest part of the summer. This area received no supplemental fertilization. Treatment rates and application dates are presented in Table 1.

Dry materials were applied by hand and liquid treatments were applied as drenches by mixing each treatment with approximately 1 gallon of water. Each treatment was applied in three replicate 6' x 9' plots. Disease ratings were recorded monthly from May to September. The height of the disease occurred in August and those readings are compared by the Duncan Multiple Range Test as seen in Table 2.

Table 2 shows the treatments rated from most summer patch control at the top, to least control on the bottom. Two treatment types proved significantly better in preventing summer patch, both are systemic fungicides. They were Rubigan (1 oz/1000 ft², May and June), and Bayleton (2 oz/1000 ft², May and June). It appears with summer patch the early fungicide treatments with either Rubigan or Bayleton are necessary to prevent severe disease out breaks in July and August.

Of the biological turf amendments, the experimental compound, Faerinfungin (18,519 ppm), from the Crop and Soil Sciences Department of Michigan State University fared the best. In this study, Faerinfungin provided disease control comparable to the widely used fungicides. The performance of this turf amendment is encouraging since much attention has been centered on biological control of plant disease.

Table 1.

ORCHARD LAKE PREVENTATIVE SUMMER PATCH STUDY
Application rates and schedule, 1987.

<u>Treatment</u>	<u>rate/1000 ft²</u>	<u>schedule</u>
1. Bayleton	1 oz	May
2. Bayleton	2 oz	May
3. Bayleton	1 oz	May & June
4. Bayleton	2 oz	May & June
5. Tersan 1991	2 oz	May
6. Tersan 1991	4 oz	May
7. Tersan 1991	2 oz	May & June
8. Tersan 1991	4 oz	May & June
9. Sulfur	1 #	monthly
10. Rubigan	0.2 oz	May
11. Rubigan	0.4 oz	May
12. Rubigan	1 oz	May
13. Rubigan	0.2 oz	May & June
14. Rubigan	0.4 oz	May & June
15. Rubigan	1 oz	May & June
16. Lawn Restore, 6-1-3	10#	monthly
17. Anderson's, A-199	10 #	monthly
18. Biocontrol	1.7 oz, A,B&C	monthly
19. Phosphorus	1#	monthly
20. check	-	-
21. Anderson's, A-299	10#	monthly
22. Faerinfungin	9,259ppm	monthly
23. Faerinfungin	18,519ppm	monthly

Table 2. 8/20 Reading.

ORCHARD LAKE PREVENTATIVE SUMMER PATCH STUDY

Disease ratings, 1987.

Treatment	rate/1000 ft ²	Interval	I	II	III	Ave	DMR
1. Rubigan	1 oz	May-June	5	0	5	3.3	A
2. Bayleton	2 oz	May-June	5	5	10	6.7	A
3. Faernfngn	18,519ppm	monthly	25	0	0	8.3	AB
4. Bayleton	1 oz	May-June	10	5	10	8.3	AB
5. Bayleton	2 oz	May	5	20	5	10.0	AB
6. Rubigan	0.2 oz	May	15	20	0	11.7	ABC
7. Rubigan	0.2 oz	May-June	15	15	10	13.3	ABC
8. Rubigan	1 oz	May	20	10	10	13.3	ABC
9. Tersan 1991	2 oz	May	15	20	5	13.3	ABC
10. Rubigan	0.4 oz	May-June	15	30	0	15.0	ABCD
11. Phosphorus	1#	monthly	20	20	5	15.0	ABCD
12. Rubigan	0.4 oz	May	10	20	20	16.7	ABCD
13. Sulfur	1 #	monthly	10	20	20	16.7	ABCD
14. Faernfngn	9,259ppm	monthly	30	20	2	17.3	ABCD
15. Tersan 1991	4 oz	May-June	30	20	5	18.3	ABCDE
16. Bayleton	1 oz	May	25	20	10	18.3	ABCDE
17. Biocntrl	1.7 oz ^{A, B, C}	monthly	25	25	10	20.0	ABCDE
18. L. Restore	10#	monthly	35	45	0	26.7	BCDE
19. Anderson's A-199	10#	monthly	50	20	10	26.7	BCDE
20. check		-	50	15	15	26.7	BCDE
21. Tersan 1991	2 oz	May-June	30	40	20	30.0	CDE
22. Tersan 1991	4 oz	May	25	25	50	33.3	DE
23. Anderson's, A-299	10#	monthly	50	60	0	36.7	E