

Table 6. cont.

Treatment	Rate/1000ft ²	Interval	I	II	III	IV	Avg.(LSD ^a)
RD 100 ^f	9.6 fl oz ^b	Variable ^c	50	10	20	10	22.5 E
RD 100 alt. RD 101 ^f	3.2 fl oz ^b	Variable ^d	30	20	25	20	23.8 DE
Heritage ^h	0.4 oz	30 days	20	30	20		23.8 DE
RD 100 alt. RD 101 ^f	9.6 fl oz ^b	Variable ^d	35	30	15	20	25.0 C-E
RD 101 ^f	3.2 fl oz ^b	Variable ^c	40	30	20	15	26.3 B-E
Biotrek Sprayable ^h + R-11 Surfactant ^h	12 fl oz ^c + 0.25 fl oz ^c	10 days 10 days	40	20	25	20	26.3 B-E
Daconil Ultrex ^g	3.8 oz	1 appl.	15	30	25	40	27.5 A-E
RD 100 ^f	3.2 fl oz ^b	Variable ^c	30	35	20	25	27.5 A-E
RD-200 ^f	4% v/v	Variable ^c	40	20	35	30	31.3 A-E
Control	-----	-----	35	25	40	25	31.3 A-E
RD 100 ^f	6.4 fl oz ^b	Variable ^c	40	25	30	40	33.8 A-D
RD 101 ^f	6.4 fl oz ^b	Variable ^c	50	35	20	30	33.8 A-D
RD 101 ^f	9.6 fl oz ^b	Variable ^c	40	20	40	40	35.0 A-C
Heritage ^h + Biotrek sprayable ^h + R-11 Surfactant ^h	0.4 oz + 12 fl oz ^c + 0.25 fl oz ^c	30 days 10 days 10 days	40	30	35	40	36.3 AB
RD 100 alt. RD 101 ^f	6.4 fl oz ^b	Variable ^d	50	20	45	35	37.5 A

^a Treatment means followed by the same letter are not significantly different from each other based on the least significant different test (LSD) at the 5% level.

^b Treatments applied in 3x spray volume (3 gal/ 1000 ft²) using 4% RD 200 in distilled water.

^c Treatments applied during weeks 1, 2, 4, 5, 7, and 8.

^d Treatment RD 100 applied during weeks 1, 4, and 7, and treatment RD 101 applied during weeks 2, 5, and 8.

^e Treatments applied in 2x spray volume (2 gal/ 1000 ft²) using 4% RD 200 in distilled water.

^f First application applied on August 21, 1997.

^g First application applied on August 4, 1997.

^h First application applied on August 8, 1997.

Bentgrass Decline Field Trial - 1997

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A summer decline study was conducted on an irrigated bentgrass (*Agrostis palustris*) putting green at the Hancock Turfgrass Research Center on the MSU campus in E. Lansing, MI. The height of cut was maintained at 1/8 inch, and the area was fertilized as needed to maintain acceptable quality turf. Treatments were applied to 4 replicate 2' x 4.5' plots in a randomized complete block design. Treatments were applied using a CO₂ backpack sprayer with a 8002E flat fan nozzle at a spray volume of 48 GPA and pressure

of 42 PSI. First applications were made on May 22, 1997 and were continued through August 25, 1997. All treatments were applied on a 14 day schedule.

Turf quality ratings were taken on June 10 (Table 7), June 27 (Table 9), and July 25 (Table 9). In addition, a *Microdochium* patch rating was taken on June 10 (Table 8) and a brown patch rating was taken on July 25 (Table 10.)

Table 7. Turf quality rating

Rating scale: 1 - 10, worst - best

Rating date: June 10, 1997

Treatment	Rate/1000 ft ²	I	II	III	IV	Ave. (LSD*)
Signature + EXP 10790 B	4 oz + 4 fl oz	7	7	7	6	6.8 A
Signature + Daconil Ultrex	4 oz + 3.8 oz	7	7	7	6	6.8 A
Signature + Ch 26019 FLO	4 oz + 4 fl oz	6	6	6	6	6 AB
Protect + Aliette Signature	8 oz + 4 oz	6	6	6	6	6 AB
Thalonil 90 DF + Signature	3.5 oz + 4 oz	6	6	6	6	6 AB
Signature + EXP 10790 A	4 oz + 4 fl oz	6	6	5	6	5.8 BC
Control	----	5	4	6	5	5 C
EXP 10790 A + Cleary 3336 F	2 oz + 2 fl oz	4	5	5	6	5 C

*Means followed by the same letter are not significantly different from each other when separated using Least Significant Difference test (p=.05).

Table 8. *Microdochium* patch rating

Rating scale: Percent area infected with *Microdochium* patch

Rating date: June 10, 1997

Treatment	Rate/1000 ft ²	I	II	III	IV	Ave. (LSD*)
Signature + EXP 10790 B	4 oz + 4 fl oz	0	0	0	0	0 A
Signature + Daconil Ultrex	4 oz + 3.8 oz	0	0	0	1	0.3 A
Signature + Ch 26019 FLO	4 oz + 4 fl oz	0	1	1	1	0.8 A
Thalonil 90 DF + Signature	3.5 oz + 4 oz	0	5	0	0	1.3 A
EXP 10790 A + Cleary 3336 F	2 oz + 2 fl oz	0	1	5	2	2 A
Control	----	1	0	3	10	3.5 A
Protect +Aliette Signature	8 oz + 4 oz	15	5	0	0	5 A
Signature + EXP 10790 A	4 oz + 4 fl oz	15	0	7	0	5.5 A

*Means followed by the same letter are not significantly different from each other when separated using Least Significant Difference test (p=.05).

Table 9. Turf quality rating

Rating scale: 0 - 9, worst - best

Rating date: June 27, 1997

Treatment	Rate/1000 ft ²	I	II	III	IV	Ave. (LSD*)
Signature + Daconil Ultrex	4 oz + 3.8 oz	8	8	8	8	8 A
Thalonil 90 DF + Signature	3.5 oz + 4 oz	8	8	8	8	8 A
Signature + EXP 10790 B	4 oz + 4 fl oz	8	8	7	7	7.5 AB
Protect + Aliette Signature	8 oz + 4 oz	7	7	7	8	7.3 BC
Signature + Ch 26019 FLO	4 oz + 4 fl oz	7	7	7	7	7 BC
Signature + EXP 10790 A	4 oz + 4 fl oz	7	7	7	6	6.8 CD
EXP 10790 A + Cleary 3336 F	2 oz + 2 fl oz	6	6	6	7	6.3 D
Control	----	5	5	6	6	5.5 E

*Means followed by the same letter are not significantly different from each other when separated using Least Significant Difference test (p=.05).

Table 9. Turf quality rating

Rating scale: 0 - 9, worst - best

Rating date: July 25, 1997

Treatment	Rate/1000 ft ²	I	II	III	IV	Ave. (LSD*)
Signature + Daconil Ultrex	4 oz + 3.8 oz	7	8	8	8	7.8 A
Signature + EXP 10790 B	4 oz + 4 fl oz	8	8	8	7	7.8 A
Thalonil 90 DF + Signature	3.5 oz + 4 oz	6	7	8	8	7.3 AB
Protect + Aliette Signature	8 oz + 4 oz	7	7	7	7	7 ABC
Signature + Ch 26019 FLO	4 oz + 4 fl oz	7	6	7	6	6.5 BC
Signature + EXP 10790 A	4 oz + 4 fl oz	7	7	6	6	6.5 BC
EXP 10790 A + Cleary 3336 F	2 oz + 2 fl oz	6	6	6	7	6.3 C
Control	----	5	4	6	5	5 D

*Means followed by the same letter are not significantly different from each other when separated using Least Significant Difference test (p=.05).

Table 10. Brown patch rating

Rating scale: Percent area infected with Brown patch

Rating date: July 25, 1997

Treatment	Rate/1000 ft ²	I	II	III	IV	Ave. (LSD*)
Signature + EXP 10790 B	4 oz + 4 fl oz	5	0	0	0	1.3 A
Protect + Aliette Signature	8 oz + 4 oz	0	5	0	10	3.8 AB
Thalonil 90 DF + Signature	3.5 oz + 4 oz	5	5	5	5	5 AB
Signature + Daconil Ultrex	4 oz + 3.8 oz	5	7	5	5	5.5 AB
Signature + Ch 26019 FLO	4 oz + 4 fl oz	7	5	5	7	6 AB
EXP 10790 A + Cleary 3336 F	2 oz + 2 fl oz	15	10	10	10	11.3 BC
Signature + EXP 10790 A	4 oz + 4 fl oz	10	5	20	25	15 C
Control	----	30	30	10	25	23.8 D

*Means followed by the same letter are not significantly different from each other when separated using Least Significant Difference test (p=.05).

Summer Decline on *Poa annua* - 1997

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A summer decline study was conducted on an irrigated annual bluegrass (*Poa annua*) fairway at the Hancock Turfgrass Research Center on the MSU campus in E. Lansing, MI. The height of cut was maintained at 1/2 inch, and the area was fertilized as needed to maintain acceptable quality turf. Treatments were applied to 3 replicate 2' x 4.5' plots in a randomized complete block design. Treatments were applied using a CO₂ backpack sprayer with a 8002E flat fan nozzle at a spray volume of 48 GPA and pressure of 42 PSI. First applications were made on May 22, 1997 and were continued through August 25, 1997. All treatments were applied on a 14 day schedule.

Turf quality ratings were taken on June 10 (Table 11), June 27 (Table 13), and July 25 (Table 14). In addition, a *Microdochium* patch rating was taken on June 10 (Table 12) and a dollar spot/summer patch disease rating was taken on July 25 (Table 15.)

Table 11. Turf quality rating

Rating scale: 1 - 10, worst - best

Rating date: June 10, 1997

Treatment	Rate	I	II	III	Ave. (LSD*)
Aliette + Fore WP	4 oz + 8 oz	7	7	6	6.7 A
Aliette Signature + Exp 10790 A	4 oz + 4 fl oz	6	7	6	6.3 A
Aliette Signature + Daconil Ultrex	4 oz + 3.8 oz	6	6	6	6.0 A
Control	-----	4	5	4	4.3 B

*Means followed by the same letter are not significantly different from each other when separated using Least Significant Difference test (p=.05).