

Brown Patch and Pythium Blight Fungicide Field Studies

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Brown patch is caused by the fungus *Rhizoctonia solani*. It is culturally managed by reducing the amount of nitrogen applied just before and during hot, humid weather and by removing guttation water early in the morning. Pythium blight is caused by *Pythium aphanidermatum*. Cultural management of this disease includes light watering after sunrise and syringing at midday. Good soil drainage is imperative. Low to moderate fertility is best for both diseases.

In this field study, both diseases have been encouraged. Weekly fertilization with milorganite (6-2-0) at 1/2# actual N per 1000 ft² and weekly inoculation of each plot with either *Rhizoctonia* or *Pythium* growing on wheat seeds (20g per plot) are strategies currently employed. Treatments were applied beginning on 6/15/94 according to company protocols.

Some disease symptoms have been noted, however, there has not been enough damage or disease severity to date to accurately rate the plots individually.

A list of treatments, rates, and application intervals follows with a corresponding plot plan.

Brown Patch Treatment List

Treatments	rate/1000ft ²	interval
1. Sentinel (WG)	0.25 oz	14 days
2. Sentinel (WG)	0.33 oz	14 days
3. Prostar (50WP)	2 oz	14 days
4. Daconil 2787 (F)	6 fl oz	14 days
5. Chipco 26019 (F)	4 fl oz	14 days
6. Curalan (F)	2 fl oz	14 days
7. Curalan (DF)	1 oz	14 days
8. Curalan (DF) + Daconil 2787 (WDG)	1 oz + 3 oz	14 days
9. Curalan (DF) + Thiram (42F)	1 oz + 5.4 fl oz	14 days
10. Curalan (DF) + Fore (WP)	1 oz + 3 oz	14 days
11. Curalan (DF) + Prostar (WP)	1 oz + 1.5 oz	14 days
12. Curalan (DF) + Rubigan (AS)	1 oz + 2.5 fl oz	14 days
13. Daconil 825 (SDG)	3.8 oz	14 days
14. Fluazinam 500(F)	0.5 fl oz	14 days
15. Fluazinam 500(F)	1 fl oz	21 days
16. ASC-67098-Z	3.6 oz	21 days
17. ASC-66825 75(SDG)	0.67 oz	21 days
18. ASC-66825 75(SDG)	1 oz	21 days
19. S-4404	2x	14 days
20. S-4404	2x	21 days
21. Control	-----	-----

Pythium Blight Treatment List

Treatments	rate/1000ft ²	interval
1. Subdue (2E)	2 fl oz	14 days
2. Aliette (WDG)	6 oz	14 days
3. DW-92 (1x)	65 ml	14 days
4. DW-92 (2x)	130 ml	14 days
5. DW-92 (4x)	260 ml	1 app.
6. DW-92 (4x) Sylgard	+ 260 ml 100 ml	1 app.
7. Control	-----	-----

1994 HTRC Field Studies for Brown Patch and Pythium Blight

Brown Patch									Pythium Blight					
Rep 1	1	2	3	4	5	6	7	xx	1	2	3	4	5	Rep 1
	14	13	12	11	10	9	8	xx	9	8	7	6	4	Rep 2
	15	16	17	18	19	20	21	xx	6	3	1	8	7	
Rep 2	16	15	3	13	19	6	xx	9	2	5	2	5	7	Rep 3
	4	8	14	21	9	2	12	xx	6	9	8	1	4	
	5	20	10	7	11	1	17	xx	3	6	3	7	2	Rep 4
Rep 3	13	4	9	11	7	16	18	xx	1	4	8	5	9	
	5	19	14	3	15	10	xx	xx	xx	xx	xx	xx	xx	
	18	12	21	2	8	20	xx	xx	xx	xx	xx	xx	xx	
Rep 4	6	17	1	6	18	5	xx	xx	xx	xx	xx	xx	xx	
	20	3	1	9	17	4	xx	xx	xx	xx	xx	xx	xx	
	8	2	16	10	11	7	xx	xx	xx	xx	xx	xx	xx	
	19	21	13	15	14	12	xx	xx	xx	xx	xx	xx	xx	