

Tour Stop #9: Anthracnose on *Poa annua*

Nancy Dykema, Dr. Joe Vargas, Ron Detweiler, Paul Giordano, Leo Yan, Mitch McCarty, Kristen Dykema, Hannah Edwards, and Marty Mugerian
 Department of Plant Pathology
 Michigan State University

Anthracnose, caused by *Colletotrichum cereale*, is a devastating disease that attacks annual bluegrass, and occasionally bentgrass. Traditionally, it has been a problem on annual bluegrass fairways, but recently has emerged as a disease on greens as well. Low fertility, low mowing heights, and excess moisture, such as from heavy irrigation or heavy rainfall, contribute to this problem. When infection occurs on fairways, it usually affects the foliage of the plants causing the turf to look brown and wilted. The pathogen can also infect the crowns of plants, turning them a charcoal black color, particularly on greens height turf. If there is damage to the crown of the plant, recovery is often quite slow. Foliar infections typically recover more quickly than infections that occur in the crown of the plant.

Crown Rot Anthracnose Study on Annual Bluegrass Green - 2010

Trt No.	Treatment Name	Rate	Rate Unit	Application Interval
1	Untreated Control			
2	F9057	0.13%	v/v	7 -14 days*
3	F9057	0.25%	v/v	7-14 days*
4	Banner Maxx	2 fl oz	/1000 ft ²	14 days
4	Daconil Ultrex	3 oz	/1000 ft ²	14 days
5	Civitas	16 fl oz	/1000 ft ²	14 days
5	Harmonizer	1 fl oz	/1000 ft ²	14 days
6	Civitas	16 fl oz	/1000 ft ²	14 days
6	Harmonizer	1 fl oz	/1000 ft ²	14 days
6	Banner Maxx	0.5 fl oz	/1000 ft ²	14 days
6	Daconil Ultrex	1.5 oz	/1000 ft ²	14 days
7	Civitas	8 fl oz	/1000 ft ²	14 days
7	Harmonizer	0.5 fl oz	/1000 ft ²	14 days
7	Banner Maxx	0.5 fl oz	/1000 ft ²	14 days
7	Daconil Ultrex	1.5 oz	/1000 ft ²	14 days
8	Civitas	8 fl oz	/1000 ft ²	7 days
8	Harmonizer	0.5 fl oz	/1000 ft ²	7 days
25	OGS9010	3 fl oz	/1000 ft ²	14 days
26	OGS9010	6 fl oz	/1000 ft ²	14 days
27	Trinity	1 fl oz	/1000 ft ²	14 days
28	Insignia SC	0.54 fl oz	/1000 ft ²	14 days
28	Trinity	1 fl oz	/1000 ft ²	14 days
29	Honor	1.1 oz	/1000 ft ²	14 days
30	Interface	3 fl oz	/1000 ft ²	14 days
31	Interface	4 fl oz	/1000 ft ²	14 days
32	Interface	5 fl oz	/1000 ft ²	14 days
33	Interface	6 fl oz	/1000 ft ²	14 days

Crown Rot Anthracnose Study on Annual Bluegrass Green - 2010

Trt No.	Treatment Name	Rate	Rate Unit	Application Interval
34	Tartan		1.5 fl oz/1000 ft ²	14 days
35	Reserve		2.5 fl oz/1000 ft ²	7 days
36	Reserve		3.2 fl oz/1000 ft ²	14 days
37	Reserve		3.5 fl oz/1000 ft ²	14 days
38	Iprodione Pro 2SE		4 fl oz/1000 ft ²	14 days
39	Emerald		0.13 oz/1000 ft ²	14 days
40A	Honor		0.83 oz/1000 ft ²	14 days, 2 apps ALT
40B	Iprodione Pro 2SE		4 fl oz/1000 ft ²	14 days, 1 app
41	Renown		4.5 fl oz/1000 ft ²	14 days
42	Instrata		5 fl oz/1000 ft ²	14 days
43	Concert		4.5 fl oz/1000 ft ²	14 days
44	QP Myclobutanil 20 T&O		1.2 oz/1000 ft ²	14 days
45	QP Myclobutanil 20 T&O		2.4 oz/1000 ft ²	14 days
46	QP Propiconazole 14.3		2 fl oz/1000 ft ²	14 days
47	QP Myclobutanil 20 T&O		1.2 oz/1000 ft ²	14 days
47	Foursome		16 fl oz/a	14 days
48	QP Myclobutanil 20 T&O		2.4 oz/1000 ft ²	14 days
48	Foursome		16 fl oz/a	14 days
57	FP 747		8 fl oz/100 gal	7 days
57	Astron		1.5 fl oz/1000 ft ²	7 days
57	Echo 6F ETQ		2 fl oz/1000 ft ²	7 days
57	Knife Plus		2 fl oz/1000 ft ²	7 days
57	PK Fight		2.5 fl oz/1000 ft ²	7 days
57	Power 12-6-0		9 fl oz/1000 ft ²	7 days
57A	Protesyn		3 fl oz/1000 ft ²	14 days ALT
57B	Floradox Pro		3 fl oz/1000 ft ²	14 days
58	Torque		0.6 fl oz/1000 ft ²	14 days
59A	Torque		0.6 fl oz/1000 ft ²	14 days ALT
59B	Affirm		0.9 oz/1000 ft ²	14 days
59B	Spectro 90WDG		3 oz/1000 ft ²	14 days
71	QP Propiconazole 14.3		2 fl oz/1000 ft ²	14 days
71	Foursome		16 fl oz/a	14 days
73	OGS9010		3 fl oz/1000 ft ²	14 days
73	Banner Maxx		1 fl oz/1000 ft ²	14 days
74A	OGS9010		3 fl oz/1000 ft ²	14 days, 1 app FB
74B	OGS9010		1.5 fl oz/1000 ft ²	14 days
74	Banner Maxx		2 fl oz/1000 ft ²	14 days

*First 2 applications made on 14 day interval and next 3 applications made on 7 day interval.
 Note: Treatments 9-24, 49-56, and 60-70 are proprietary and will not be shown during field day.
 Note: Treatment 57 does not receive supplemental fertilizer.

Crown Rot Anthracnose Study on Annual Bluegrass Green - 2010

	A	B	C	D	E	F	G	H	I	
1		32	33	9		71	48	5	19	1
2	1	31	34	4		21	11		38	2
3	2	30	35		59	44	65		53	3
4	3							25		4
5		73		66		55		40	47	5
6		29	36	58	74	13	41			6
7	67		72			26	18	68	45	7
8	5	28	37					50		8
9	6	27	38	57				64		9
10	7	26								10
11	8	25	39	56	60	22			43	11
12	69		40	55	61	16	63			12
13	10	24	41		66					13
14	11	23	42	54	62	37				14
15	12	22	43		63	58				15
16	13	21	44	53	64	28	30			16
17	14	20	45	52	65	56				17
18	15	19	46	51	68	8	39		69	18
19	16	18	47	50	70	12			67	19
20	61	17	48	49	71	6	61	29	54	20
21	59	32	25	4	18	36	34			21
22	22	46	63	10	27	4	3	74		22
23	70	23	2	65	16	17	60	1	59	23
24	29	11	35	20		14	9		52	24
25	48	41	62	14	56	33	57	46	20	25
26	73	45	5	8	38	7	15	70	42	26
27	47	21	40	30	71	10	51	27	73	27
28	31	3	64	53	1	62	24		32	28
29	55	36	19	74	54	2	49	35		29
30	68	52	12	58	43	31	23			30
31	15	39	60	34				72		31
32	42	6	44			37	25	63	9	32
33	24	51	17	7	13	65	57	28	70	33
34	66		69							34
35		72				26	50	36	68	35
36	67					34	59	19		36
37					69					37
38				41	30	64		51	24	38
39							29	11	60	39
40		33	50	39	71	17	56	14	38	40
41	49	28		67		2	73	53		41
42	26	37	52		74	1	58	22		42
43	57	9	23	49	21	43	4	46	15	43
44		35	7		42	8		6	33	44
45			20	44	62		12	40	31	45
46	54	18				48			66	46
47	10	47			32	16	45	3	55	47
48	61	5	13		27				72	48

NORTH

Foliar Anthracnose Study on Annual Bluegrass Fairway – 2010

Trt No.	Treatment Name	Rate	Rate Unit	Application Interval
1	F9057	0.125	% v/v	7 days
2	F9057	0.25	% v/v	7 days
3	GWN-9803	0.5	oz/1000 ft2	14 days
3	GWN-6526	0.25	% v/v	14 days
4	GWN-9803	2	oz/1000 ft2	14 days
4	GWN-6526	0.25	% v/v	14 days
5	Tourney	0.28	oz/1000 ft2	14 days
6	Trinity	1	fl oz/1000 ft2	14 days
7	Insignia SC	0.54	fl oz/1000 ft2	14 days
7	Trinity	1	fl oz/1000 ft2	14 days
8	Honor	1.1	oz/1000 ft2	14 days
9	Banner Maxx	1	fl oz/1000 ft2	14 days
10	Banner Maxx	1	fl oz/1000 ft2	14 days
10	Regalia	2	fl oz/1000 ft2	14 days
11A	Banner Maxx ALT	1	fl oz/1000 ft2	7 days ALT
11B	Regalia	2	fl oz/1000 ft2	7 days
12	Regalia	2	fl oz/1000 ft2	7 days
13	Interface	5	fl oz/1000 ft2	14 days
14	Triton Flo	0.5	fl oz/1000 ft2	14 days
14	Chipco 26GT	4	fl oz/1000 ft2	14 days
25	Untreated Control			

Foliar Anthracnose Study on an Annual Bluegrass Fairway- 2010

NORTH

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1		15		16		18		19		24		6	10	1	11	5
2	1	2	3	4	5	6	7	8	3	25	17	4	14	22		21
3	22	17	14	13	12	11	10	9	12	8				19		15
4		23	25	8		20		21		18				16		20
5	24		19		16		15		7	2	9	23	13			
6	20		23	11	2	14	23		24		10	3	25	22		
7	18		7	17		9		16			14	12	6	17	9	2