Stop #1: 2013 Turf Disease Trials: Anthracnose

Tyler Mock, Ryan Nichols, and Jim Baird

Anthracnose

Twenty eight fungicide treatments were evaluated for their ability to control anthracnose preventatively on an annual bluegrass green. Inoculation was achieved through core aeration and dragging in order to spread the existing inoculum. The plot was originally established in 2007 from seed with 'Peterson's Creeping' annual bluegrass. The study was set up as a randomized complete block experiment with four replications. Fungicide treatments were initiated on 18 June 2013 before disease symptoms were present. For fertility the plot received 0.3 lb N/1000ft² on 13 June 2013 and again on 9 August 2013. The plot was top dressed on 31 July 2013.

Results:

- ✓ Overall, anthracnose disease pressure and distribution were moderate.
- ✓ The cool early summer, heavy rain events, and hot humid late summer created an abnormal anthracnose presence making detection variable from week to week.
- Several fungicides or fungicide programs reduced disease severity compared to the untreated control.

Notes:

Treatment list

Trt		Treatment		Rate	Appl	Trt		Treatment		Rate	Appl
No.	Туре	Name	Rate	Unit	Code	No.	Туре	Name	Rate	Unit	Code
	CHK	control				16	FUNG	A20744	0.3	oz wt/1000 ft2	ADFI
2	FUNG	Xzemplar	0.26	fl oz/1000 ft2	ABDEFHI		FUNG	Daconil Action	3.5	fl oz/1000 ft2	ABDEFHI
3		Xzemplar		fl oz/1000 ft2	ABDEFHI		FUNG	Appear	6	fl oz/1000 ft2	ADFI
-	FUNG	Trinity		fl oz/1000 ft2	ABDEFHI		FUNG	Briskway	0.5	fl oz/1000 ft2	BEH
4	FUNG	Lexicon	0.34	fl oz/1000 ft2	ABDEFHI	17	FUNG	A20744	0.3	oz wt/1000 ft2	ADFI
5	FUNG	Secure	0.5	fl oz/1000 ft2	ABDEFHI		FUNG	Secure	0.5	fl oz/1000 ft2	ADFI
	FUNG	Daconil Action	3.5	fl oz/1000 ft2	ABDEFHI		FUNG	Appear	6	fl oz/1000 ft2	ADFI
6	FUNG	Secure	0.5	fl oz/1000 ft2	ABDEFHI		FUNG	Daconil Action		fl oz/1000 ft2	BEH
	FUNG	Daconil Action	3.5	fl oz/1000 ft2	ABDEFHI		FUNG	Briskway		fl oz/1000 ft2	BEH
	FUNG	Appear	6	fl oz/1000 ft2	ABDEFHI	18	FUNG	Daconil Action		fl oz/1000 ft2	ABDEFHI
7	FUNG	Medallion L	1	fl oz/1000 ft2	ABDEFHI		FUNG	Appear		fl oz/1000 ft2	ADFI
	FUNG	Daconil Action	3.5	fl oz/1000 ft2	ABDEFHI		FUNG	Briskway		fl oz/1000 ft2	BEH
	FUNG	Appear	6	fl oz/1000 ft2	ABDEFHI	19	FUNG	A12531		fl oz/1000 ft2	ADFI
8	FUNG	Medallion L	1	fl oz/1000 ft2	ABDEFHI		FUNG	Chipco Signature		oz wt/1000 ft2	ADFI
		Appear	6	fl oz/1000 ft2	ABDEFHI		FUNG	A20581	-	fl oz/1000 ft2	BEH
9	FUNG	Heritage	0.4	oz wt/1000 ft2	A	20	FUNG	Daconil Action		fl oz/1000 ft2	ADFI
	FUNG	Daconil Action	3.5	fl oz/1000 ft2	ABDFI		FUNG	Appear		fl oz/1000 ft2	ADFI
		Appear	-	fl oz/1000 ft2	ABDEFHI		FUNG	A15457		fl oz/1000 ft2	BEH
	FUNG	Briskway		fl oz/1000 ft2	DEH	21	FUNG	Daconil Action		fl oz/1000 ft2	ABEHI
	FUNG	Secure		fl oz/1000 ft2	FI		FUNG	Secure		fl oz/1000 ft2	DF
10	FUNG	Daconil Action		fl oz/1000 ft2	AFHI		FUNG	Briskway		fl oz/1000 ft2	DF
		Appear	-	fl oz/1000 ft2	ABDEFHI		FUNG	Appear		fl oz/1000 ft2	ABDEFHI
	FUNG	Briskway		fl oz/1000 ft2	BDE	22	FUNG	Daconil Action		fl oz/1000 ft2	ABEFI
11	FUNG	Daconil Action		fl oz/1000 ft2	ADFI		FUNG	Appear		fl oz/1000 ft2	ABDEFHI
		Appear	-	fl oz/1000 ft2	ADFI		FUNG	Briskway		fl oz/1000 ft2	BEF
		A20744		oz wt/1000 ft2	BEH		FUNG FUNG	Secure		fl oz/1000 ft2 oz wt/1000 ft2	DH ADH
12	FUNG	Daconil Action		fl oz/1000 ft2	ABDEFHI	23	FUNG	Tourney		fl oz/1000 ft2	ADH BE
	FUNG	Appear		fl oz/1000 ft2	ADFI		FUNG	Insignia			BE F
		A20744		oz wt/1000 ft2	BEH		FUNG	Signature Daconil 1000	4	oz wt/1000 ft2 oz wt/1000 ft2	F
13	FUNG	Daconil Action		fl oz/1000 ft2	ABDEFHI	24	FUNG			fl oz/1000 ft2	F ACEG
		Appear	-	fl oz/1000 ft2	ADFI		FUNG	Encartis		fl oz/1000 ft2	ACEG
4.4		A20744		oz wt/1000 ft2	BEH	-	FUNG	Triton Flo		oz wt/1000 ft2	ADF
14	FUNG	Daconil Action		fl oz/1000 ft2	ADFI	20	FUNG	Daconil Ultrex		oz wt/1000 ft2	AH BDEF
		Appear	-	fl oz/1000 ft2	ADFI		FUNG	Insignia		fl oz/1000 ft2	BDEF
		A20744		oz wt/1000 ft2	BEH		FUNG	Chipco Signature		oz wt/1000 ft2	DF
45	FUNG	Secure Descril Action		fl oz/1000 ft2	BEH	27	FUNG	Disarm C		fl oz/1000 ft2	ABDEFHI
15	FUNG FUNG	Daconil Action		fl oz/1000 ft2 fl oz/1000 ft2	ADFI ADFI		FUNG	Torque		fl oz/1000 ft2	ADEFNI
	FUNG	Appear	-		BEH	20	FUNG	Legend		fl oz/1000 ft2	ADFI
	FUNG	A20744		oz wt/1000 ft2	BEH		FUNG	Affirm		oz wt/1000 ft2	BEH
L	FUNG	Secure	0.5	fl oz/1000 ft2	DEH		FUNG	Spectro		oz wt/1000 ft2	вен
						20	FERT	NH4SO4		lb/1000 ft2	ABDEFHI
						29		11111004	0.2	10/1000/112	

Application Code: All of the treatments were put down every 14 days except for treatments 24 and 25 which went down on 21 day and 28 day intervals respectively.

Anthracnose Study Plot Map North/Trees

27	29	Э	X	Χ	X	23	28	10	8	5	9	20	
6	12	14	X	1	18	4	15	11	13	17	7	24	
28	19	4	X	23	26	2	21	26	16	19	25	22	
6	6	20	X	X	25	2	14	10	27	22	3	12	
24	29	17	X	11	13	15	21	1	8	18	16	5	Road
7	28	13	X	25	29	9	X	10	20	8	27	3	Ro
21	17	24		L	26	6	4	15	12	16	S	14	
11	23	5		22	19	18	1	29	28	27	26	25	
24	23	22	21	20	19	X	18	17	16	15	14	13	
12	11	10	6	8	7	X	9	5	4	Э	7	1	

Stop #1: 2013 Turf Disease Trials: Dollar Spot

Ryan Nichols, Tyler Mock, Jim Baird, Peggy Mauk, and Rui Li

Dollar Spot

Fifteen fungicide treatments and one nitrogen treatment were evaluated for their ability to control dollar spot (*Sclerotinia homoeocarpa*) preventatively on a creeping bentgrass/annual bluegrass green, established in 2005 from sod. Beginning in May 2013, nitrogen was reduced on the turf followed by inoculation with the fungus on June 14, 2013. Inoculation was achieved by spreading dollar spot infested grain evenly across the study area. The inoculum was allowed four days to colonize on the turfgrass, and then all treatments were started on June 18, 2013.

Spray Record:

Timing	A	В	С
Date	18 June 2013	2 July 2013	16 July 2013
Time	6am	6am	6am
Temperature	69.2 F	68.9 F	61.4 F
Wind	Calm	Calm	Calm
Conditions	Sunny	Overcast	Overcast

Timing	D	E	F
Date	30 July 2013	13 August 2013	27 August 2013
Time	6am	6am	6am
Temperature	60.6 F	60 F	71.5 F
Wind	Calm	Calm	Calm
Conditions	Sunny	Sunny	Cloudy

Results:

- ✓ Overall, dollar spot disease pressure was good, reaching 53% on untreated plots, and 56% on nitrogen treated plots by late July.
- Most all fungicides or fungicide programs provided effective control of dollar spot throughout the study period.
- ✓ No fungicide treatments showed signs of phytotoxicity during the study period.

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Notes:

No.	Treatment	Company	Rate (oz/M)	Timing (d)
1	Control			
2	Daconil Action	Syngenta	3.5	14
3	Daconil Action	Syngenta	7.0	14
4	Daconil Action	Syngenta	3.5	14
	Appear		6.0	
5	Daconil Action	Syngenta	7.0	14
	Appear		6.0	
6	Daconil Ultrex	Syngenta	3.2	14
	A9180		0.008	
7	Daconil Ultrex	Syngenta	6.4	14
	A9180		0.016	
8	Daconil Ultrex	Syngenta	3.2	14
	A9180		0.008	
	Appear		6.0	
9	Daconil Ultrex	Syngenta	6.4	14
	A9180		0.016	
	Appear		6.0	
10	Chipco Signature	Syngenta	4.0	14
	A12531		3.6	
11	Chipco Signature	Syngenta	8.0	14
	A12531		7.2	
12	Honor	BASF	6.0	14
13	Encartis	BASF	6.0	14
14	Xzemplar	BASF	6.0	14
15	Lexicon	BASF	4.0	14
16	NH ₄ SO ₄		6.0	14

2013 Turf Disease Trials: Dollar Spot

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Plot Map:

North

X	13	6	14	13
7	8	7	15	12
3	9	5	16	11
1	11	15	12	10
16	10	1	11	9
8	12	3	8	8
13	4	2	3	7
10	14	14	10	6
11	16	16	2	5
6	2	7	9	4
4	5	4	5	3
12	9	15	13	2
15	14	1	6	1