

Stop # 8: Anthracnose Fungicide Trial 2014

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Anthracnose

Fourteen fungicide treatments were evaluated for their ability to control anthracnose preventatively on an annual bluegrass green at the UCR Turfgrass Facility in Riverside. Soil is a Hanford fine sandy loam amended with sand. Inoculation was achieved through core aeration and dragging in order to spread the existing inoculum. The green was originally established in 2007 from seed with 'Peterson's Creeping' annual bluegrass. The green is mowed 5 times/wk at 0.2 inches and received 0.125 lb N/1000ft² monthly leading up to 27 June 2014, then again on 8 September 2014. The green was aerated with ¼-inch solid tines followed by sand topdressing on 28 August 2014.

The study was set up as a randomized complete block experiment with five replications on 4' x 6' plots. Fungicide treatments were initiated on 18 June 2014 (Application Code A) before disease symptoms were present. Treatments were sprayed every 14 days except for treatments 3 & 4, which were sprayed every 28 days. Final treatments were applied on 27 August 2014 (Application Code F). A CO₂ backpack sprayer with TeeJet 8004VS nozzles was used to provide a spray output of 2 gal/M.

Results and Conclusions:

- ✓ Overall, anthracnose disease pressure and distribution were moderate to heavy in 2014, with disease present in every replication towards the end of August.
- ✓ Most of the fungicide treatments significantly reduced disease pressure when compared with the control.
- ✓ Three treatments had excellent anthracnose control on the latest rating date of the study: Disarm C (treatment 4); A20964A, Daconil Action, and Primo Maxx applied together (treatment 10); and a fungicide regime (treatment 14) with a combination of seven different fungicides.
- ✓ Two treatments (10 & 14) received consistently high turf quality ratings throughout the study regardless of disease pressure (data not shown).

Table 1. Effects of fungicides and fungicide programs on anthracnose cover (0-100%). Disease and turf quality ratings were taken every 14 days throughout the study, but only the most recent anthracnose cover is shown below. Riverside, CA.

Trt No.	Treatment Name	Rate	Unit	Application Code	Anthracnose Cover % 8-28-14
1	Control				48.0 a
2	ARY-0534-002	0.33 fl oz/1000 ft2		ABCDEF	3.0 c
3	Disarm T	0.89 fl oz/1000 ft2		ACE	7.0 c
4	Disarm C	6 fl oz/1000 ft2		ACE	0.0 c
5	Lexicon	0.47 fl oz/1000 ft2		ABCDEF	6.0 c
6	Lexicon	0.34 fl oz/1000 ft2		ABCDEF	17.0 c
	Affirm	0.88 fl oz/1000 ft2		ABCDEF	
7	Secure	0.5 fl oz/1000 ft2		ABCDEF	31.0 b
	Daconil Action	3.5 fl oz/1000 ft2		ABCDEF	
	Signature	4 oz wt/1000 ft2		ABCDEF	
8	Secure	0.5 fl oz/1000 ft2		ABCDEF	10.0 c
	Daconil Action	3.5 fl oz/1000 ft2		ABCDEF	
	Primo Maxx	0.1 fl oz/1000 ft2		ABCDEF	
9	A20964A	0.2 fl oz/1000 ft2		ABCDEF	8.0 c
	Daconil Action	3.5 fl oz/1000 ft2		ABCDEF	
	Primo Maxx	0.1 fl oz/1000 ft2		ABCDEF	
10	A20964A	0.4 fl oz/1000 ft2		ABCDEF	0.0 c
	Daconil Action	7 fl oz/1000 ft2		ABCDEF	
	Primo Maxx	0.1 fl oz/1000 ft2		ABCDEF	
11	A20964A	0.2 fl oz/1000 ft2		ABCDEF	8.4 c
	Daconil Action	3.5 fl oz/1000 ft2		ABCDEF	
12	Velista	0.5 oz wt/1000 ft2		ABCDEF	12.0 c
	Daconil Action	3.5 fl oz/1000 ft2		ABCDEF	
	Primo Maxx	0.1 fl oz/1000 ft2		ABCDEF	
13	Velista	0.5 oz wt/1000 ft2		ABCDEF	8.6 c
	Secure	0.5 fl oz/1000 ft2		ABCDEF	
	Primo Maxx	0.1 fl oz/1000 ft2		ABCDEF	
14	Banner Maxx	2 fl oz/1000 ft2		A	0.0 c
	Daconil Action	3.5 fl oz/1000 ft2		ABCE	
	Signature	4 oz wt/1000 ft2		ABCDEF	
	Primo Maxx	0.1 fl oz/1000 ft2		ABCDEF	
	Briskway	0.5 fl oz/1000 ft2		CD	
	Secure	0.5 fl oz/1000 ft2		E	
	Velista	0.5 oz wt/1000 ft2		F	
15	Triton Flo	0.75 fl oz/1000 ft2		A	1.0 c
	Signature	4 oz wt/1000 ft2		BCDEF	
	Insignia	0.9 fl oz/1000 ft2		BD	
	Daconil Ultrex	3.2 oz wt/1000 ft2		CF	
	Medallion SC	1 fl oz/1000 ft2		E	

Means followed by same letter do not significantly differ (P=.05). Each letter in application code represents a 14-day interval.

**Anthracnose Study Plot Map
North/Trees**

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