

Fungicides for Control of Spring Dead Spot in Bermudagrass Athletic Fields - 2004

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Bermudagrass (*Cynodon dactylon* 'Mirage')

Spring dead spot; *Ophiosphaerella* spp.

Two separate trials to evaluate fungicides for control of spring dead spot (SDS) were conducted on a community church soccer field in Visalia, CA. Cultural operations were performed by maintenance gardeners and church staff and were consistent with typical maintenance at community athletic fields. In the large experiment plot size was 15 ft X 85 ft. The experiment was a randomized complete block design with four replications per treatment. Fungicides were applied on 9 Oct 2003 using an ATV mounted sprayer with an eight nozzle boom and TeeJet XR8008 nozzles at a pressure of 30 PSI. Fungicides were applied in 2 gal water per 1000 sq ft and irrigated in within two hours. Disease severity was rated on 19 Mar and 22 Apr 2004 as number of SDS spots. The second experiment (small) was a randomized complete block design with three replications per treatment. Each treatment plot was 10 ft X 10 ft. Fungicides were applied on 6 Nov 2003 using a CO₂ backpack sprayer with a three nozzle boom and 8003 nozzles at a pressure of 30 PSI. Fungicides were applied in 2.5 gal water per 1000 sq ft and irrigated in within four hours. Disease severity was rated on 9 May 2003, 19 Mar 2004 and 22 Apr 2004 as number of SDS spots and percent turfgrass area diseased.

The only treatment to provide a significant level of SDS control was Fore in the large experiment on the 22 Apr 04 rating date. None of the other treatments on any of the ratings dates provided significant SDS control. No phytotoxicity was observed from any of the fungicide treatments.

Large Experiment	Avg Number Spots ^z	
Treatment (rate/1000 sq. ft.)	19 Mar 04	22 Apr 04
Untreated check	13.5	15.25
Heritage (0.4 oz)	8.25	12.75
Rubigan (6 fl oz).	11.5	10.75
Eagle (1.2 oz)	12.0	12.75
Banner MAXX (4 fl oz).	13.0	8.0
Daconil Ultrex (5 oz)	9.5	8.0
Fore (8 oz)	11.25	5.25
Cleary's 3336 (8 oz)	12.75	8.75
Medallion (0.33 oz)	11.75	10.0
LSD (P=0.05) ^y	7.45	9.7

^z Average number of diseased spots per plot.

^y Analysis of variance was performed on the data and then Fisher's protected least significant difference (LSD) was calculated.

Small Experiment Treatment (rate/1000 sq. ft.)	Average Number Spots ^z			Percent Area Diseased ^y		
	9 May 03 ^x	19 Mar 04	22 Apr 04	9 May 03 ^x	19 Mar 04	22 Apr 04
Untreated check	12.0	15.7	14.7	23.3	32.3	25.0
Heritage (0.4 oz)	11.3	13.7	16.7	26.7	28.3	25.7
Rubigan (6 fl oz)	7.0	18.7	14.3	18.3	31.7	22.7
Eagle (1.2 oz)	11.3	14.7	14.3	23.3	25.0	20.7
Banner MAXX (4 fl oz)	12.3	13.7	17.0	23.3	48.3	35.0
Medallion (0.33 oz)	11.0	14.0	13.7	11.7	28.3	19.0
LSD (P=0.05) ^w	7.4	10.3	13.7	21.1	26.2	24.2

^z Average number of diseased spots per plot.

^y Average percent of plot area diseased.

^x Ratings taken six months prior to fungicide treatment.

^w Analysis of variance was performed on the data and then Fisher's protected least significant difference (LSD) was calculated.