

4. Benzimidazole resistant dollar spot study

The benzimidazole resistant dollar spot study was conducted on the M.S.U. Soil Farm. The treatments in study number 1 were applied on 7/8, 7/23, 8/7, 8/19 and 9/4. The treatments in Study 2 were applied on 8/7 and 8/19. All treatments were applied with a hand held CO₂ sprayer.

Study 1

The results show none of the fungicides were effective in controlling the benzimidazole resistant strain of dollar spot Table 3.

Study 2

The study was read on 8/26. Table 4 shows Daconil 2787, 6 oz., R. P. 26019 2 oz., Calo Clor 2 oz., R. P. 26019 1 oz., Actidione - Thiram 4 oz., Calo Clor 3 oz., Actidione RZ 2 oz., and Dyrene 6 oz. ranked at the top of those giving significant control over the benzimidazole resistant strain of dollar spot. Calo Clor and Actidione RZ were phytotoxic. It is obvious for complete control shorter treatment intervals will be required.

Table 3. Control of benzimidazole resistant Sclerotinia dollar spot.

Treatment ¹	Rate	Ave. Number of spots/plot		
		I (8/26)	II (9.9)	III (9/15)
MF 598	3 oz.	400*	400*	400*
MF 598	4 oz.	"	"	"
MF 598	6 oz.	"	"	"
Dithane M-45	2.25 oz.	"	"	"
Dithane M-45	3 oz.	"	"	"
Dithane M-45	4.5 oz.	"	"	"
Fungo 50	.9 oz.	"	"	"
Fungo 50	1.2 oz.	"	"	"
Fungo 50	1.8 oz.	"	"	"
Check		"	"	"

* Estimation - spots too numerous to count.

¹ Treatment dates are 7/8, 7/23, 8/23, 8/19.

Table 4. Control of benzimidazole resistant Sclerotinia dollar spot.

Treatment	rate/ 1000 sq.ft.	<u>Number of spots</u>			Average ¹
		I	II	III	
Daconil 2787	6 oz.	6	3	12	7.0 a
R.P. 26019	2 oz.	0	0	23	7.7 a
Calo-Clor ^a	2 oz.	17	20	23	20.0 a b
R. P. 26019	1 oz.	17	45	11	24.3 a b
Actidione-Thiram	4 oz.	25	25	25	25.0 a b
Calo-Clor ^a	3 oz.	28	35	21	28.0 a b
Actidione-RZ ^a	2 oz.	37	35	29	33.7 a b
Dyrene	6 oz.	60	32	85	59.0 a b
Actidione-Thiram	2 oz.	125	73	40	79.3 b c
Daconil 2787	3 oz.	65	70	106	80.3 b c
Actidione-RZ ^a	1 oz.	115	103	153	123.7 c d
Dyrene	3 oz.	200	150	92	147.3 d
Tersan 75	3 oz.	75	263	213	183.7 e
Tersan 1991	1 oz.	400*	400*	400*	400* f
Cleary's 3224	2 oz.	400*	400*	400*	400* f
Check		400*	400*	400*	400* f

¹ Treatment followed by the same letter are not significantly different from each other at the 5% level.

* Estimation - spots too numerous to count.

^a Phytotoxic to the turf.