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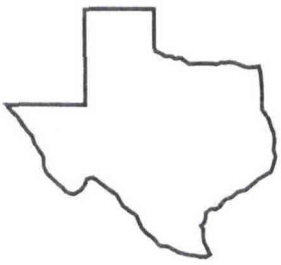
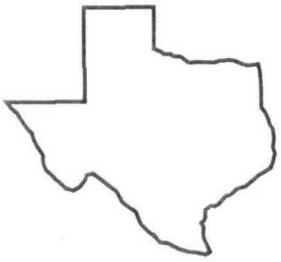
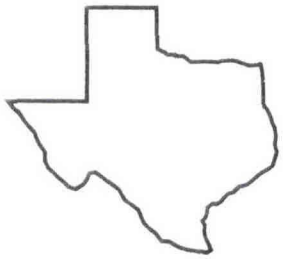
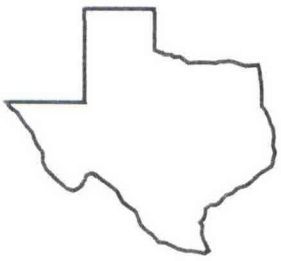




Overton Field Day Report - 1994





1994 Research Center Technical Report No. 94-1

Texas Agricultural Experiment Station • Edward A. Hiler, Director
The Texas A&M University System • College Station, Texas

ROSE FUNGICIDE TRIAL 1993

H. Brent Pemberton, George L. Philley,
and William E. Roberson

Background. A block of 'Peace' rose plants planted in May 1993 was used in a spray trial to evaluate new fungicides for control of blackspot (*Diplocarpon rosae*). Attention was given to treatments which showed promise for controlling the disease with less frequent applications, smaller quantities, and/or less toxic compounds than those currently in common use. 'Peace' was chosen because it is highly susceptible to the blackspot fungus.

Fungicide treatments were initiated on 25 May 1993. Plants were sprayed on 7, 14, 21, 28, or 42 day intervals. Plants were rated in July, September, and November 1993. Only the November ratings are shown (Table 1). A defoliation rating of 1-10 (1=0-10% defoliation and 10=91-100% defoliation) was assigned to indicate loss of foliage due to black spot infection along with a black spot rating of 1-10 (1 = no black spot and 10 = all leaves infected and heavy defoliation). A control rating of 1-3 (1 = excellent, 2 = good, and 3 = poor disease control) was also made to assess overall fungicide performance.

Research Findings. Untreated control plants were more than 50% defoliated by early July. Excellent season long control was achieved with cyproconazole at the rate of 0.088 lb/100 gal every 14 or 21 days or 0.0352 lb/100 gal every 42 days (Table 1). The best results with Daconil were with a 7 day spray interval. Banner was not very effective when using a 14 day spray interval. Triforine plus Dithane tank mixes sprayed every 7 days (commonly used by rose producers) gave good control regardless of rate. Also, the Triforine plus Dithane tank mixes resulted in better control than either compound alone.

Two newer chemicals included in the trial were RH7592 and Eagle. While Eagle failed to control blackspot, 2 oz RH7592/100 gal resulted in relatively good control.

Application. The best season long control of black spot on 'Peace' roses was with cyproconazole on 14 or 21 day spray intervals and Daconil, Banner plus Daconil, or tank mixes of Triforine and Dithane on 7 day spray intervals.

Acknowledgement. This work was partially funded by Ciba Geigy Corporation, ISK Biotech Corporation, Rohm and Haas Company, and Sandoz Crop Protection Corporation.

Table 1. Treatments and ratings of fungicides for black spot control on 'Peace' rose, 1993.

Treatment		Rate[z] (per 100 gal)	Spray Interval	November Ratings		
				Blackspot	Defoliation	Control
1.	Untreated Control	-	-	9.1	7.9	3.0
2.	Daconil	1 lb	7	1.3	2.1	1.6
3.	Daconil	1 lb	14 Delayed[y]	6.3	4.5	3.0
4.	Daconil	1 lb	14	5.9	3.0	2.4
5.	Daconil	1 lb	21	8.6	6.5	3.0
6.	Daconil + Dithane M45	1/2 + 3/4 lb	7	2.0	2.1	2.1
7.	Dithane M45	1.5 lb	7	4.3	3.9	2.6
8.	Triforine EC + Dithane M45	9 oz + 3/4 lb	7	1.1	1.9	1.4
9.	Triforine EC + Dithane M45	18 oz + 1 1/2 lb	7	1.0	1.4	1.4
10.	Triforine EC	18 oz	7	5.8	4.5	2.9
11.	Banner + Triforine EC	5 oz + 18 oz	14	2.6	2.9	2.1
12.	Banner + Triforine EC	3 oz + 9 oz	14	3.8	4.8	3.0
13.	Banner + Triforine EC	3 oz + 9 oz	7	1.4	2.3	2.0
14.	Banner + Daconil	3 oz + 1/2 lb	7	1.4	2.0	1.6
15.	Banner + Daconil	3 oz + 1/2 lb	14	3.9	4.8	2.6
16.	Baking Soda + Sunspray Oil	4.4 lb + 1.04 gal	7	2.3	3.1	2.4
17.	Sunspray Oil	1.04 gal	7	5.5	4.5	2.6
18.	Eagle	2 oz	14	5.8	4.8	2.4
19.	RH7592	2 oz	14	1.4	2.3	1.8
20.	Cyproconazole	0.044 lb a.i.	14	1.6	2.3	1.6
21.	Cyproconazole	0.088 lb a.i.	21	1.1	1.6	1.3
22.	Cyproconazole	0.176 lb a.i.	28	1.1	2.1	1.4
23.	Cyproconazole	0.352 lb a.i.	42	1.0	2.0	1.1
24.	Cyproconazole	0.088 lb a.i.	14 Delayed[y]	1.0	1.1	1.0
25.	Cyproconazole	Variable[x]	-	4.6	3.9	2.4
26.	Cyproconazole + Daconil	0.022 lb a.i. + 1 lb	14	1.1	2.0	1.4
27.	Cyproconazole + Daconil	0.022 lb a.i. + 1 lb	21	5.0	3.8	2.6
28.	Cyproconazole	0.088 lb a.i.	Variable[w]	1.1	1.9	1.8
29.	Cyproconazole	0.088 lb a.i.	14	1.0	1.1	1.0
30.	Cyproconazole	0.132 lb a.i.	21	1.1	2.0	1.9
31.	Bravo	1 lb	14	3.1	2.4	2.1

[z]Rate - Formulated unless noted.

[y]Treatment not started until black spot symptoms appeared.

[x]0.088 lb a.i./100 gal 14 days twice, then 0.044 lb a.i./100 gal every 14 days until midsummer, then 0.044 lb a.i./100 gal every 21 days.

[w]Every 14 days twice, then every 21 days until midsummer, then every 28 days.