

(continued M. G. Anderson)

AINFO

Test	Treatment and rate	Treatment date (mo)	Storage length (mo)	Trimming loss (%)	
				check	treated
1	Rovral 50W 2000 mg/L	0	5	32	10*
2	Rovral 50W 2000 mg/L	0	5	15	18
3	Rovral 50W 1000 mg/L	0	10	55	58
4	Rovral 50W 1000 mg/L	5	10	62	58

*Means within row significantly different by anova (P=0.05).

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CABBAGE (*Brassica oleracea* var. *capitata* 'Round Dutch')Downy mildew; *Peronospora parasitica*

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CONTROL OF DOWNY MILDEW IN CABBAGE, 1984: The experiment was conducted on a field of Tifton loamy sand at the Coastal Plain Station. The soil was plowed, rototilled, shaped into beds 6 ft wide, and 700 lb/A of 10-10-10 fertilizer broadcast. Nemacur was applied for nematode control and Treflan and Dual for weed control. Cabbage was transplanted Apr 2 with 50 lb/A of 10-34-0 in the transplant water. A randomized complete block design with four replications was used. Each plot was two rows 25 ft long and 3 ft apart on a 6 ft bed with plants one foot apart in the row. Additional fertilizer totaling 166 lb N, 20 lb P, 120 lb K, 60 lb S, 30 lb Mg, 1 lb B, and 29 lb Ca/A was applied as needed. Sevin, Pydrin, and Ambush were used for control of foliar insects. Rainfall occurred on 20 different days and plots were irrigated with overhead sprinklers 14 times. There was no rainfall from May 31 to Jun 20. Fungicide treatments were applied at 40 psi in 20 gal water/A using a plot sprayer with Delavan LF 2-80° tips. Treatments were begun Apr 17 and continued weekly until May 30, then weekly or biweekly until Jun 12. Thirty plants in the middle 15 ft of each plot were examined for downy mildew May 2, 16, 24 and Jun 11. Disease severity (percentage of foliage discolored or decayed) was estimated visually Jun 18 and 25. Heads from the middle 10 ft of one row (30 ft²) were harvested as they reached marketable size Jun 8, 15, and 22.

Downy mildew was not detected in the field until May 24. The disease spread very rapidly in control plots in early Jun, but was confined primarily to the lower leaves and did not cause any loss in yield of marketable heads. All treatments gave good control of downy mildew, but weekly sprays alternating Bravo 500 and DS-63049 almost completely prevented disease symptoms until harvesting was completed.

Treatment and rate/A	Number of sprays	Plants with downy mildew (%)		Foliage discoloration and decay (%)		Yield lb/A
		Jun 4	Jun 11	Jun 18	Jun 25	
Control	0	60 a ¹	98 a	3 a	6	29834
Bravo 500 2.25 pt weekly	9	9 bc	24 b	2 b	4	30026
Dithane M-22 1.5 lb weekly	9	20 b	30 b	2 b	3	29770
Bravo 500 2.25 pt; DS-63049 1.6 lb ²	9	0 c	1 c	1 b	3	28970
Bravo 500 2.25 pt; DS-63049 1.6 lb ³	8	16 bc	20 bc	1 b	4	28746
Bravo 500 2.25 pt; Ridomil MZ58 1.5 lb ⁴	8	5 bc	8 bc	1 b	2	32587

¹Numbers followed by the same letter in columns are not significantly different according to Duncan's multiple range test. No letters indicate no significant differences. ²Bravo 500 applied biweekly and DS-63049 applied alternate biweekly. ³Bravo 500 weekly until first symptoms of downy mildew then DS 63049 biweekly. ⁴Bravo 500 weekly until first symptoms of downy mildew then Ridomil MZ58 biweekly.

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CARROT (*Daucus carota* 'Harumaki Kinko' and 'Nantes')Alternaria blight; *Alternaria dauci*

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EVALUATION OF FUNGICIDES FOR CONTROL OF ALTERNARIA BLIGHT IN CARROTS, 1984: The experiment was carried out on an irrigated mineral soil, under natural infection, at Brasilia, from Dec 83 - Mar 84. A split plot design, with 4 replications, was used where varieties ('Harumaki Kinko' and 'Nantes' classified as intermediate resistant and susceptible to *A. dauci*; respectively) were split within the whole plot fungicides. Experimental units were 3m wide by 5 m long beds where carrots were sown in rows 0.2 m apart. Fungicide treatments were started on Jan 9 and were repeated at two different intervals (4 and 7 day) until Mar 5 (18 and 9 applications, respectively). Fungicides were applied using a high-volume sprayer.

Favorable disease conditions existed throughout the season. Disease ratings were taken 70 days after germination and plots were harvested 90 days later. Difolatan, Rovral and Sumilex provided a good control of Alternaria blight on both intermediate resistant and susceptible cultivars. On the susceptible cultivars, better results were obtained by applying these fungicides at 4-day intervals.

Treatment and rate/ha	Spray schedule (days)			
	4	7	4	7
	Disease rating*		Marketable yield t/ha	
Harumaki Kinko				
Sumilex 50 PM 1.0 kg	2.00 aa**	2.00 aa	34.75 aa	29.29 ab
Rovral 50 PM 1.5 kg	2.00 aa	2.25 aba	33.33 aa	29.50 aa
Difolatan 50 PM 3.0 kg	2.00 aa	2.75 bcb	35.25 aa	23.38 bb
Cropotex 50 PM 1.5 kg	2.00 aa	3.50 deb	25.25 ba	13.92 cb
Tilt 25 L 1.0 L	2.75 ba	3.25 cdb	21.04 ba	16.54 cda
Control	4.00 ca	4.00 ea	8.54 ca	9.08 da
Nantes				
Rovral 50PM 1.5 kg	2.25 aa	3.25 abb	13.50 aa	9.04 aa
Difolatan 50 PM 3.0 kg	2.00 aa	3.75 bb	14.50 aa	7.08 ab
Sumilex 50 PM 1.0 kg	2.25 aa	3.00 ab	11.79 aa	7.75 ab
Tilt 25 L 1.0 L	4.00 ba	5.00 cb	7.08 ba	3.54 bb
Cropotex 50 PM 1.5 kg	2.50 aa	4.50 cb	6.58 ba	2.29 bb
Control	5.00 ca	5.00 ca	2.13 ca	1.75 ba

*Disease rating: 1 = no disease, 2 = few lesions on the lower leaves, 3 = few lesions on the upper and lower leaves heavily attacked, 4 = upper heavily attacked and lower leaves dead, 5 = all leaves dead. **Numbers in a column with the same capital letter and in a row with the same small letter are not significantly different by the DMRT (P=0.05).