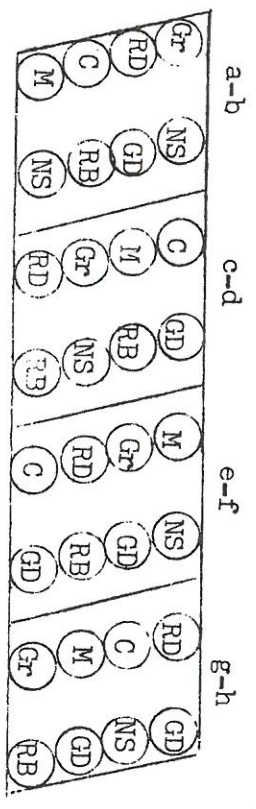


1975 APPLE SCAB INFECTION PERIODS - HIGHLAND, NEW YORK

Spray Date	McIntosh Growth Stage	Wetting Periods			Anticipated Scab Severity		
		Date	Rainfall (in.)	Duration (hrs.)	Mean Temp. (F.)	Primary	Secondary
April 23	1/4-1/2" G	April 24-25	0.49	30	53	heavy	
May 1	Tight cluster	May 1-2	0.37	40	47	heavy	
		May 4-5	0.67	25	49	moderate	
	early pink	May 6-7	0.64	16	50	light	
May 8	3-5 term lvs.						
	full pink-early bloom	May 11-13	2.35	51	58	heavy	heavy
	full bloom-petal fall	May 16	0.30	8.5			light
May 17	8-9 term leaves	May 21	0.1	2			
		May 22-23	0.12	16	67	moderate	heavy
May 29	12-14 term leaves	May 30-31	0.60	23	65	heavy	heavy
		June 1	0.15	13.5	71	moderate	heavy
		June 3	0.12	5			
		June 4	0.06	9.5	57		moderate
		June 5-7	0.95	50	54	heavy	heavy
June 10	15-17 term leaves	June 12-13	1.64	34	63	heavy	heavy
		June 16-17	0.01	21	68		heavy

END OF PRIMARY SCAB

Spray Date	McIntosh Growth Stage	Wetting Periods			Anticipated Primary	Scab Severity Secondary
		Date	Rainfall (in.)	Duration (hrs.)		
June 24						
July 8	19-24 term leaves	June 28-29	1.82	34	70	heavy
		July 9	0.62	19	67	heavy
		July 13-14	5.57	41	70	heavy
		July 15-16	0.16	10	71	moderate
		July 20-21	2.03	30	71	heavy
July 23	Terminal bud					
		July 24-25	1.54	10.5	69	moderate
		August 4	0.34	6	72	light
		August 6-7	1.07	26	60	heavy
		August 8	0.17		61	
		August 16-17	0.39	31	64	heavy



C - Cortland
 GD - Golden Delicious
 Gr - R. I. Greening
 M - McIntosh
 NS - Northern Spy
 RB - Rome Beauty
 RD - Red Delicious

RESULTS OF 1975 FIELD FUNGICIDE TRIAL
 HUDSON VALLEY LABORATORY, HIGHLAND, N.Y.
 R.C. Pearson and F.W. Meyer

No.	Treatment + Rate/100 Gal.	Apple Scab - McIntosh		
		% cluster lvs. infected ¹	% terminal lvs. infected ²	% leaf area infected ³
1.	DPX 112-2 1 lb. + Superior 70° Oil 1 qt.	0 a	0.4abc	0.01a
2.	DPX 115-B 1 1/2 lb.	0.1a	0 a	0 a
3.	PP588 25 EC 8 oz. + Captan 50W 2 lb.	1.3a	2.7 c	0.07a
4.	PP588 25 EC 16 oz. + Captan 50W 2 lb.	0.8a	2.1 c	0.04a
5.	EL222 1 EC 126 ml.	0 a	0 a	0 a
6.	Glyodex 37-22W 4 oz. + Dikar 80W 1 lb.	0.3a	3.2 c	0.08a
7.	Glyodin 30% 1 pt. + Benlate 50W 2 oz. + Manzate 200 80W 1/2 lb.	1.6a	0.5abc	0.01a
8.	Benlate 50W 2 oz. + Superior 70° Oil 1 qt.	0 a	0 a	0 a
9.	Captan 50W 2 lb.	0.2a	1.4 bc	0.03a
10.	Manzate 200 80W 2 lb.	0.5a	2.2 c	0.05a
11.	Untreated	57.8 b	71.5 d	13.7 b

Front Scab - Non on any tree
check 8% front scab

The small letters indicate Duncan's multiple range groupings of treatments which do not differ significantly at the 5% level.

¹Data recorded from all cluster leaves on each of 20 cluster/replicate (3 single tree reps). July 25, '75.
²Data recorded from 20 oldest leaves on each of 20 terminals/replicate (3 single tree reps) 8/5, 8/6, '75.
³Based on Barrett-Horsfall ratings of the 20 oldest leaves on each of 20 terminals/replicate. 8/5, 8/6, '75.
 Fungicides applied as dilute sprays at 550 psi by hand gun on 4/23, 5/1, 5/8, 5/17, 5/29, 6/10, 6/24, and 7/8, and 7/23.
 Other sprays: Fruitone N 5ppm on Red Del and 10 ppm on McIntosh and Cortlands (6/2); Thuricide-HP 1/4 lb/100 gal (6/24), Thiodan 1 lb./100 gal. and Plictran 3 oz./100 gal. (7/8).
⁴Manzate 200 omitted from 4/23, 5/1, 6/24, 7/8 and 7/23 and 7/23 addition.

RESULTS OF 1975 FIELD FUNGICIDE TRIAL
 HUDSON VALLEY LABORATORY, HIGHLAND, N.Y.
 R.C. Pearson and F.W. Meyer

No.	Treatment + Rate/100 Gal.	Powdery Mildew - Cortland	
		% leaf area infected ¹	% leaves infected ²
1.	DPX 112-2 1 lb. + Superior 70° Oil 1 qt.....	0.2ab	4.1ab
2.	DPX 115-B 1 1/2 lb.....	0. a	1.5ab
3.	PP588 25FC 8 oz. + Captan 50W 2 lb.....	0.1a	1.4ab
4.	PP588 25FC 16 oz. + Captan 50W 2 lb.....	0. a	0.3a
5.	EL222 1 EC 126 ml.....	0.1a	1.2ab
6.	Glydodex 37-22W 4 oz. + Dikar 80W 1 lb.....	1.5 bc	14.9 cd
7.	Glyodin 30% 1 pt. + Benlate 50W 2 oz. + Manzate 200 80W 1/2 lb. ³	0.4ab	3.5ab
8.	Benlate 50W 2 oz. + Superior 70° Oil 1 qt.....	0 a	1.0ab
9.	Captan 50W 2 lb.....	7.0 d	21.1 dde
10.	Manzate 200 80W 2 lb.....	2.0 c	6.6 bc
11.	Untreated	8.0 d	33.6 e

The small letters indicate Duncan's multiple range groupings of treatments which do not differ significantly at the 5% level.

¹Based on Barratt-Horsfall ratings of the 10 youngest terminal leaves on each of 20 terminals/replicate (3 single tree reps). August 4 and 5, 1975.
²Data recorded from 10 youngest terminal leaves on each of 20 terminals/replicate (3 single tree reps) August 4 and 5, 1975.
 Fungicides applied as dilute sprays at 550 psi by hand gun on 4/23, 5/1, 5/8, 5/17, 5/29, 6/10, 6/24, 7/8 and 7/23.
 Other sprays: Fruitone N 5ppm on Red Del and 10 ppm on McIntosh + Cortland (6/2); Thuricide-HP 1/4 lb./100 gal. (6/24); Thiodan 1 lb./100 gal. and Plictran 3 oz./100 gal. (7/8)
³Manzate 200 omitted from 4/23, 5/1, 6/24, 7/8 and 7/23 applications.

RESULTS OF 1975 FIELD FUNGICIDE TRIAL
 HUDSON VALLEY LABORATORY, HIGHLAND, N. Y.
 R.C. Pearson and F.W. Meyer

No.	Treatment + Rate/100 Gal.	Cedar-Apple Rust	
		Rome cluster leaves ¹ % lvs. inf. lesions/inf. leaf	Golden Del. terminal leaves ² % lvs. inf. lesions/inf. leaf
1.	DPX 112-2 1 lb. + Superior 70° Oil 1 qt.....	0.2a	
2.	DPX 115-B 1 1/2 lb.....	0.4ab	2.5 b
3.	PP588 25EC 16 oz. + Captan 50W 2 lb.....	1.0 bc	10.3 c
4.	PP588 25EC 16 oz. + Captan 50W 2 lb.....	-	16.4 c
5.	EL222 1EC 126ml.....	-	12.8 c
6.	Glydodex 37-22W 4 oz. + Dikar 80W 1 lb.....	0 a	Ø a
7.	Glydodin 30% 1 pt. + Benlate 50W 2 oz. + Manzate 200 80W 1/2 lb. 3 ...	0.3a	2.1 b
8.	Benlate 50W 2 oz. + Superior 70° Oil 1 qt.....	0.3ab	3.6 b
9.	Captan 50W 2 lb.....	1.5 c	18.9 cd
10.	Manzate 200 80W 2 lb.....	1.4 c	16.8 c
1.	Untreated	0 a	0.5ab
		43.7 d	28.0 d
			1.64 e

The small letters indicate Duncan's multiple range groupings of treatments which do not differ significantly at the 5% level.

Data recorded from all cluster leaves on each of 20 clusters/replicate (3 single tree reps) June 26, 1975. Data recorded from all leaves on each of 20 terminals/replicate (3 single tree reps) July 1, 1975. Fungicides applied as dilute sprays at 550 psi by hand gun on April 23, May 1, 8, 17, 29, June 10, 24, July 8, and 23.

Other sprays: Fruitone N 5ppm on Red Del. and 10 ppm on McIntosh and Cortland (June 2); Thurricide-HP 1/4 lb./100 gal. (June 24); Thiodan 1 lb/100 gal, and Plictran 3 oz./100 gal. (July 8). Manzate 200 omitted from April 23, May 1, June 24, July 8 and 23 applications.

1975 CEDAR APPLE RUST POST-INFECTION FUNGICIDE TRIAL - STONERIDGE, N.Y.

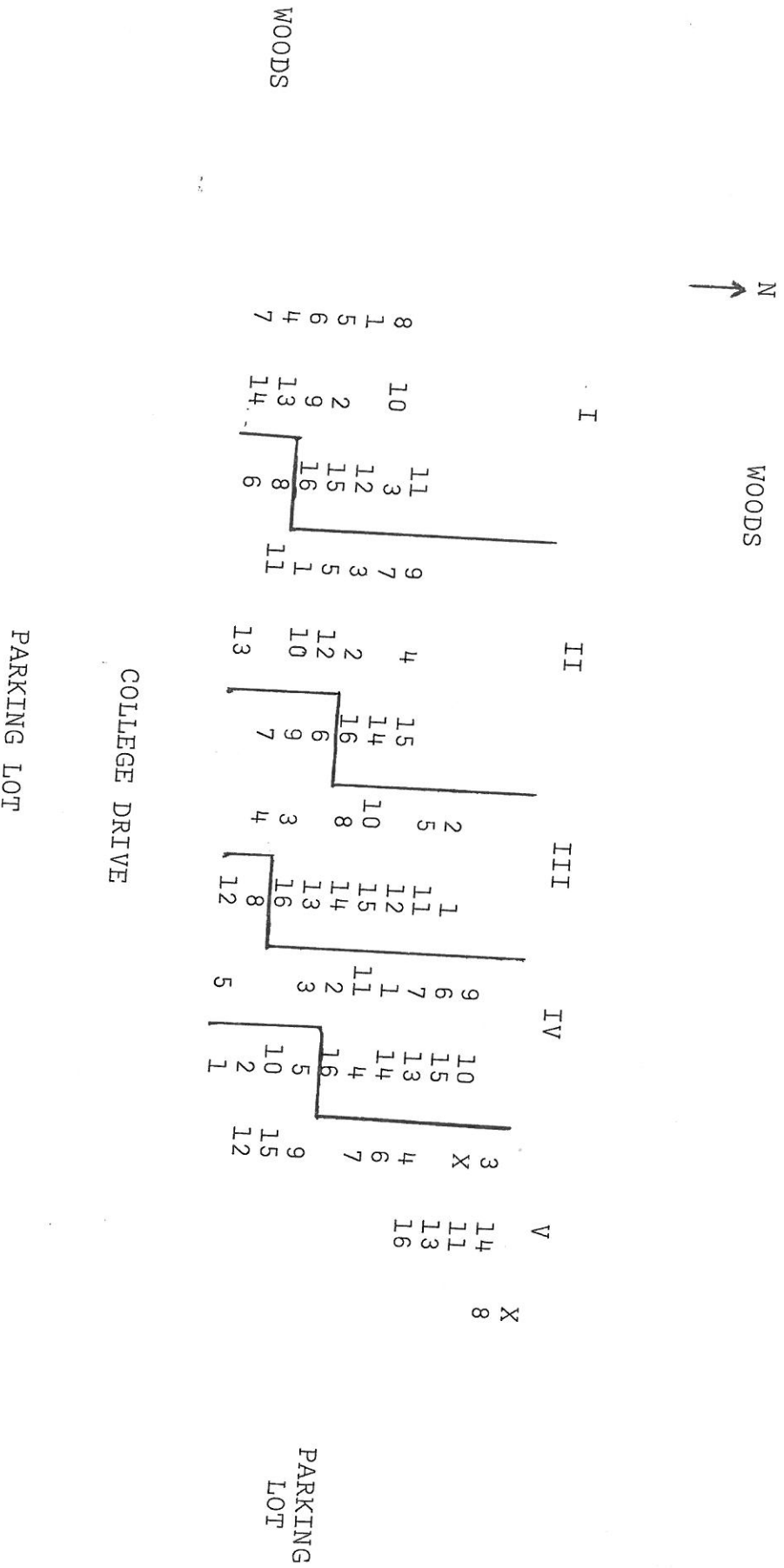
R.C. Pearson and F.W. Meyer

Golden Delicious Growth Stage

Infection Periods	Golden Delicious Growth Stage	Spray Date	Dithane M 45															Untreated	
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
April 24-25	1/4"-1/2" G.																		
May 1-2	3 term. lvs.																		
May 4-5																			
May 6-7	Tight cluster 3-5 term. lvs.																		
May 11-13	Pink 7-9 term. lvs.	May 14	X						X					X					
May 16	bloom																		
May 22-23																			
May 30-31		May 31		X						X					X				
		June 1			X						X					X			
		June 2				X						X					X		
		June 4					X						X					X	
		June 9		X					X					X					X

1975 CEDAR APPLE RUST POST-INFECTION FUNGICIDE TRIAL. STONERIDGE, N.Y.

R. C. Pearson and F. W. Meyer



No. Treatment ¹	% Leaf Area Infected ² (Golden Delicious)					
	Cluster lvs. sprayed		Terminal lvs. sprayed		Terminal lvs. sprayed	
	5/14 (pink) ³	Normal ⁶	5/14 (pink) ³	Normal	5/14 ³ + 6/9 ⁴	Normal
Total ⁵	Total	Total	Total			
1. Dithane M45	35.3a	34.9 b	26.9 b	26.9 b	9.3a	9.3 c
6. EL 222	18.2a	0 a	12.3a	0.5a	13.2a	0.7a
11. CME 74770	16.1a	0.2a	13.6a	1.2a	11.2a	4.0 b
16. Untreated	27.4a	27.4 b	21.8 b	21.8 b	21.2a b	21.2 d

The small letters indicate Duncan's multiple range of treatments which do not differ significantly at the 5% level.

- 1 Dithane M45 80W 2 lb./100 gal., EL222 1EC 126ml./100 gal., CME74770 20EC 16 oz./100 gal.
 - 2 % leaf area infected determined by Barratt-Horsfall ratings of all leaves exposed to the fungicide treatment (20 clusters or terminals/replication, 5 half tree reps/treatment). Data recorded June 11, 19, and July 29, 30, and 31.
 - 3 Fungicide applied 64 hours after start of rain on May 11,
 - 4 Fungicide applied 95 hours after start of rain on May 11.
 - 5 % leaf area covered with "total lesions" (normal lesions + abnormal lesions).
 - 6 % leaf area covered with normal lesions.
- Difolatan 4F 3 gal./acre applied to all treatments April 17.

No. Treatment ¹	Spray Date	Application time (hrs.) after start of rain period on:		% leaf area infected ² (Golden Delicious)	
		May 30	June 1	Total lesions ³	Normal lesions ⁴
2. Dithane M45	5/31	25	-	18.4	c
3. Dithane M45	6/1	50	15	19.8	c
4. Dithane M45	6/2	69	33	17.6	bc
5. Dithane M45	6/4	117	81	21.7	c
7. EL222	5/31	25	-	9.8a	
8. EL222	6/1	50	15	9.2a	
9. EL222	6/2	69	33	10.2a	
10. EL222	6/4	117	81	8.8a	
12. CME 74770	5/31	25	-	7.1a	
13. CME 74770	6/1	50	15	8.6a	
14. CME 74770	6/2	69	33	11.5ab	
15. CME 74770	6/4	117	81	8.9a	
16. Untreated				21.2	c

The small letters indicate Duncan's multiple range of treatments which do not differ significantly at the 5% level.

- 1 Dithane M45 80W 2 lb./100 gal, EL222 1 EC 126 ml./100 gal., CME 74770 20EC 16 oz./100 gal.
- 2 % leaf area infected determined by Barratt-Horsfall ratings of all terminal leaves exposed to the fungicide treatment (20 terminals/replication, 5 half tree reps/treatment). Data recorded July 29, 30, and 31.
- 3 % leaf area covered with "total lesions" (normal lesions + abnormal lesions).
- 4 % leaf area covered with normal lesions.
- 5 Hard rain shower for 10 min. shortly after treatments 3 and 8 applied, treatment 13 applied after the rain shower.
 Difolatan 4F 3 gal./100 gal. applied to all treatments April 17.

RESULTS OF 1975 FIELD FUNGICIDE TRIAL
 HUDSON VALLEY LABORATORY, HIGHLAND, NEW YORK
 R.C. PEARSON AND F.W. MEYER

No.	Treatment + Rate/100 Ga.	POWDERY MILDEW			
		Cortland	McIntosh	Cortland	McIntosh
		%leaf area inf. 1	%leaves inf. 2	%leaf area inf. 1	%leaves inf. 2
1.	DPX 112-2 1 lb. + Superior 70° Oil 1 qt.	0.2ab	4.1ab	0.03ab	0.8a
2.	DPX 115-B 1 1/2 lb.	0. a	1.5ab	0.03ab	0.7a
3.	PP588 25EC 8 oz. + Captan 50W 2 lb.	0.1a	1.4ab	0.01a	0.1a
4.	PP588 25EC 16 oz. + Captan 50W 2 lb.	0 a	0.3a	0 a	0 a
5.	EL222 1 EC 126 ml.	0.1a	1.2ab	0 a	0 a
6.	Glyodex 37-22W 4 oz. + Dikar 80W 1 lb.	1.5 bc	14.9 cd	0.25 bc	4.2ab
7.	Glyodin 30% 1 pt. + Benlate 50W 2 oz. + Manzate 200 80W 1/2 lb. 3.	0.4ab	3.5ab	0.03ab	0.7a
8.	Benlate 50W 2 oz. + Superior 70° Oil 1 qt.	0 a	1.0ab	0.01a	2.2a
9.	Captan 50W 2 lb.	7.0 d	21.1 de	1.1 d	10.9 b
10.	Manzate 200 80W 2 lb.	2.0 c	6.6 bc	0.27 bc	6.8ab
11.	Untreated	8.0 d	33.6 e	0.44 c	4.5ab

The small letters indicate Duncan's multiple range groupings of treatments which do not differ significantly at the 5% level.

- 1 Baseç on Barratt-Horsfall ratings of the 10 youngest terminal leaves on each of 20 terminals/replicate (3 single tree reps). August 4, and 5, 1975.
- 2 Data recorded from 10 youngest terminal leaves on each of 20 terminals/replicate (3 single tree reps) August 4, and 5, 1975.
Fungicides applied as dilute sprays at 550 psi by hand gun on 4/23, 5/1, 5/8 5/17; 5/29, 6/10, 6/24, 7/8, and 7/23.
Other sprays: Fruitone N 5ppm on Red Del. and 10 ppm on McIntosh + Cortland (6/2); Thuricide-HP 1/4 lb./100 gal. (6/24); Thiodan 1 lb./100 gal. and Plictran 3 oz./100 gal. (7/8).
- 3 Manzate 200 omitted from 4/23, 5/1, 6/24, 7/8, and 7/23 applications.