RESULTS FROM FUNGICIDE TRIALS IN THE HUDSON VALLEY

Data from 2012 field trials

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Final Report
November 20, 2012

	Date	max temp	min temp	LW hr	total rain	RH≥ 90%	avg wind	solar rad.	growth stage	Spray dates with spray interval in days followed by rain during the interval (& hr wetting on 3rd line) M.9	Pond	N40	pears
Th	3/1/12	35	31	22	0.57	24	1.1	27					
F	3/2/12	34	29	3	0.28	24	3.5	61					
Sa	3/3/12	56	33	11	0.43	14	3.6	140					
Su	3/4/12	42	28				3.2	126					
M	3/5/12	39	22				4.8	246					
Tu	3/6/12	42	18				3.2	232					
W	3/7/12	60	32				8	233					
Th	3/8/12	69	47	1	0.01	4	11.4	198					
F	3/9/12	46	30	5	0.12	4	5.1	197					
Sa	3/10/12	39	24				3.8	221					
Su	3/11/12	62	29				6.7	253					
M	3/12/12	70	41				5.6	234	ST				
Tu	3/13/12	74	52			3	5.2	191					
W	3/14/12	66	47			1	3.5	257					
Th	3/15/12	55	39			7	3.9	213					
F	3/16/12	52	41	5	0.02	24	4.8	67					
Sa	3/17/12	66	42	4		14	2.8	213	GT				
Su	3/18/12	71	43			15	5.9	205					
M	3/19/12	77	49			10	3.7	232					
Tu	3/20/12	74	53			2	4.8	267	QIG				
W	3/21/12	71	56			17	3.3	112					
Th	3/22/12	80	51	2		11	4.5	260				M1	
F	3/23/12	72	56			9	3.6	218	HIG	X	M		
Sa	3/24/12	64	51				6.1	127					
Su	3/25/12	54	42	5	0.01	2	1.5	94					
M	3/26/12	49	32			6	6.9	271					
Tu	3/27/12	46	25				5.7	330					
W	3/28/12	60	37	3	0.11	1	4.3	321					
Th	3/29/12	50	37		0.01		7.4	266					
F	3/30/12	50	29				5.5	546					
Sa	3/31/12	38	30	14	0.38	17	4.7	65					
Su	4/1/12	45	35	9	0.21	16	2.1	142	TC	X-9	**T1-9**		
M	4/2/12	51	32	8	0.01	7	7.6	413		*0.51*	***0.51***		
Tu	4/3/12	60	28				5.9	366					
W	4/4/12	62	44				5.6	547					
Th	4/5/12	50	37				6.9	294					
F	4/6/12	52	30				6.2	426					
Sa	4/7/12	57	33				6	455					M1
Su	4/8/12	63	37				4.5	587					
M	4/9/12	57	45				5.7	274	PK				
Tu	4/10/12	57	43				5	354					
W	4/11/12	51	39				5.3	271		X-10	**T2-10**		
Th	4/12/12	56	40				7.4	421		*0.22*	***0.22***		
F	4/13/12	65	40				3.1	607	KB			**T1-22**	M2-6
Sa	4/14/12	71	39				3.9	562				***0.73***	
Su	4/15/12	73	57				3.6	381					
M	4/16/12	87	60			7	4.8	538					
Tu	4/17/12	73	54				6.5	453	FB				
W	4/18/12	55	42				6	236		X-7			
Th	4/19/12	72	41			1	4.2	573					
F	4/20/12	75	49			6	4.7	577			M-9	**T2-7**	M3-7
Sa	4/21/12	76	49	3	0.37	11	5.5	445	PF-mac				
Su	4/22/12	47	39	15	0.64	24	10.2	137					
M	4/23/12	52	39	18	0.56	24	7.9	97					
Tu	4/24/12	55	37	4	0.01	9	6.3	402					
W	4/25/12	58	36			3	3.8	353					
Th	4/26/12	59	34	1		9	2.6	152		X-8			M4-6
F	4/27/12	52	35	4	0.02	4	4.4	419		*1.58*		*1.60*	*1.58*
Sa	4/28/12	59	33				3.3	388				*0.91*	
Su	4/29/12	60	34				5.1	408					
M	4/30/12	64	32				4.1	306					

	Date	max temp	min temp	LW hr	total rain	RH≥ 90%	avg wind	solar rad.	growth stage	Spray dates with spray interval in days followed by rain during the interval (& hr wetting on 3rd line) M.9	Pond	N40	pears
Tu	5/1/12	61	48	8	0.28	19	3.4	73					
W	5/2/12	54	49	4	0.02	24	2.9	54	PF-GD		**T3-12**		
Th	5/3/12	59	49	12	0.15	24	3.1	71	12 mm JM		***1.90***		
F	5/4/12	76	52	9	0.46	19	3.6	172				**T3-14**	M5-8
Sa	5/5/12	70	56			13	4.9	171				***2.51***	*0.93*
Su	5/6/12	66	49			2	4.3	199					
M	5/7/12	66	47	3	0.01	8	3.5	261		X-11			
Tu	5/8/12	58	52	13	0.38	18	4.7	66		*0.94*			
W	5/9/12	70	57	12	0.05	22	2	131					
Th	5/10/12	60	45	10	0.32	12	2.3	140					
F	5/11/12	69	44			5	3.4	272				*0.76*	
Sa	5/12/12	80	43				3.5	224		*I*	***T4-10***	*0.98*	
Su	5/13/12	82	56			3	2.7	357			***1.37***		M6-9
M	5/14/12	70	59	15	0.38	17	2.4	149					*0.76*
Tu	5/15/12	65	59	24	0.60	24	2.2	34					
W	5/16/12	77	61	11		15	3.1	294					
Th	5/17/12	67	47			3	6.5	270				**T4-13**	
F	5/18/12	74	44			5	2.6	272		X-11		***1.74***	
Sa	5/19/12	81	48			3	3.3	148		*1.73*			
Su	5/20/12	82	54			5	2.8	305					
M	5/21/12	64	56	11	0.61	12	1.7	29					M7-8
Tu	5/22/12	69	57	17	0.73	24	2.8	71					*0.98*
W	5/23/12	77	59	2		22	2.5	253					
Th	5/24/12	73	62			24	2.6	135					
F	5/25/12	75	61	6	0.04	22	3.5	169			*X-13*	M-8	
Sa	5/26/12	84	65	5	0.14	19	2.6	296			*2.32*	*1.38*	
Su	5/27/12	81	61	7	0.02	11	2.7	401					
M	5/28/12	85	65	9	0.02	13	3.2	431					
Tu	5/29/12	88	66	5	0.65	14	3	389					
W	5/30/12	80	62	13	0.32	18	2.3	317					
Th	5/31/12	80	57	6		2	4	188					
F	6/1/12	72	53	1	0.02	8	3.9	185		X-14	*X-7*	*M-7*	T1-11
Sa	6/2/12	71	57	12	0.72	14	3.9	126		*2.53*	*1.19*	*1.19*	*2.53*
Su	6/3/12	73	50	4	0.01	12	1.7	212					
M	6/4/12	60	52	9	0.05	10	4.3	73					
Tu	6/5/12	63	49		0.01	12	3.9	109					
W	6/6/12	74	48	5	0.34	9	1.6	259					
Th	6/7/12	76	50	14	0.15	3	2	404					
F	6/8/12	77	53	14	0.16	1	1.9	354					
Sa	6/9/12	72	55	5	0.03		0.6	86					
Su	6/10/12	84	60			3	2.1	402					
M	6/11/12	77	59			5	4.4	185					
Tu	6/12/12	70	58	10	0.46		3.1	47					
W	6/13/12	74	61	10	1.07		5.1	330					
Th	6/14/12	77	59			7	5.8	521					
F	6/15/12	78	51			5	2.1	354		X-14			T2-14
Sa	6/16/12	81	49			6	1.9	496		*3.02*			*3.02*
Su	6/17/12	73	54			11	2.9	172					
M	6/18/12	71	51			11	3.3	281					
Tu	6/19/12	76	60			14	3.7	235					
W	6/20/12	**96**	67			4	1.8	514					
Th	6/21/12	**96**	71			5	1.4	399					
F	6/22/12	87	67	5	2.00	5	2.2	401			X-21	ST1-21	
Sa	6/23/12	85	63		0.01	1	2.2	216			*3.02*	*3.02*	
Su	6/24/12	80	56	1		1	2.7	110					
M	6/25/12	74	56	16	0.41	1	1.6	79					
Tu	6/26/12	71	51			2	2.8	164					
W	6/27/12	82	57			3	3	145					
Th	6/28/12	89	61			4	2.3	109					
F	6/29/12	**92**	68	4	0.06	4	2	278					

	Date	max temp	min temp	LW hr	total rain	RH≥ 90%	avg wind	solar rad.	growth stage	Spray dates with spray interval in days followed by rain during the interval (& hr wetting on 3rd line) M.9	Pond	N40	pears
Sa	6/30/12	**91**	66			6	2.2	343			F-8		
Su	7/1/12	**91**	68			9	2.2	235			2.48		
M	7/2/12	85	63			6	2.3	167					
Tu	7/3/12	85	61			9	1.9	114		F-18			F-18
W	7/4/12	**90**	68	9	0.27	11	1.4	153		*2.48*			*2.48*
Th	7/5/12	84	69			10	3.6	333					
F	7/6/12	87	62			8	2	129				Ftrt-14	
Sa	7/7/12	86	63	2	0.02	4	0.9	119				*2.75*	
Su	7/8/12	85	61			6	0.4	320				*35*	
M	7/9/12	83	58			1	1.9	109					
Tu	7/10/12	83	54	3		7	1.6	104					
W	7/11/12	88	57	3		7	2.6	153					
Th	7/12/12	88	65		0.02	6	3.4	188					
F	7/13/12	89	69			8	2.4	489					
Sa	7/14/12	87	70	2		11	2.3	548			F-14		
Su	7/15/12	85	68	10	0.54	22	1.7	251			0.31		
M	7/16/12	89	67	8	0.33	12	1.1	523					
Tu	7/17/12	**91**	68			10	3.3	481		F-14			F-14
W	7/18/12	**93**	73	2	0.01	18	3	488		*1.18*			*1.18*
Th	7/19/12	79	66			13	4.4	451					
F	7/20/12	69	61	16	0.50	15	3.3	116					
Sa	7/21/12	79	61	9	0.19		2.4	601					
Su	7/22/12	82	62		0.67	4	3.1	593					
M	7/23/12	83	66	8	0.22	13	2.7	322					
Tu	7/24/12	**90**	67			3	3.1	537				Ftrt-18	
W	7/25/12	85	58			7	2.4	674			F-11	*2.50*	
Th	7/26/12	84	64	10	0.65	10	2.9	310			2.46	*63*	
F	7/27/12	85	69	8	0.03	7	2.9	406					
Sa	7/28/12	74	67	8	0.34		2.9	80					
Su	7/29/12	77	65	5	0.03		2.3	272					
M	7/30/12	82	64			7	2.3	443					
Tu	7/31/12	78	65			9	1.9	331					F-14
W	8/1/12	82	65			4	2.8	360					*2.64*
Th	8/2/12	88	66			8	2.2	584		F-16			
F	8/3/12	**90**	67			7	2.1	523		*2.64*			
Sa	8/4/12	**90**	71			5	2.7	568					
Su	8/5/12	84	71	8	0.47	15	3.6	347					
M	8/6/12	82	64	5		9	1.6	313					
Tu	8/7/12	83	58			4	1.9	511					
W	8/8/12	87	64			9	2	505				Ftrt-15	
Th	8/9/12	87	69	2		14	2.1	399			F-15	*1.52*	
F	8/10/12	73	64	8	0.68	17	1.8	49			1.52	*44*	
Sa	8/11/12	83	64	5	0.03	20	2.5	272					
Su	8/12/12	83	68			8	2	550					
M	8/13/12	84	62			8	1.3	296					
Tu	8/14/12	76	62	8	0.20	5	1	152					
W	8/15/12	80	59	8	0.81	8	1.9	304					
Th	8/16/12	84	62			7	1.4	437					F-16
F	8/17/12	83	61	5	0.04	6	2.3	356			F-8		*2.19*
Sa	8/18/12	76	59	9	0.20	7	2.4	430			1.72		
Su	8/19/12	74	53			5	1.6	416					
M	8/20/12	79	56	4	0.13	5	1.4	389		F-18			
Tu	8/21/12	78	59	9	0.05	10	1.4	253		*2.43*			

	Date	max temp	min temp	LW hr	total rain	RH≥ 90%	avg wind	solar rad.	growth stage	Spray dates with spray interval in days followed by rain during the interval (& hr wetting on 3rd line) M.9	Pond	N40	pears
W	8/22/12	81	57			7	1.6	358				Ftrt-14	
Th	8/23/12	85	61			5	1.9	487				*2.14*	
F	8/24/12	87	59			3	1.6	494				*58*	
Sa	8/25/12	83	62			2	1.7	315					
Su	8/26/12	83	62			2	2.1	459					
M	8/27/12	80	64	6	1.21	11	2.3	239					
Tu	8/28/12	86	65	9	0.14	12	2.4	217					
W	8/29/12	77	59			9	4	483			F-12		
Th	8/30/12	79	51			5	2.4	509			1.77		
F	8/31/12	88	61			8	3.5	514					
Sa	9/1/12	86	68			11	3.1	547					
Su	9/2/12	80	66	1		6	2.5	368					
M	9/3/12	71	62			17	1.4	156					
Tu	9/4/12	77	65	19	0.28	11	1.3	114					
W	9/5/12	79	67	10	0.40	9	3.9	231					
Th	9/6/12	79	62	3		10	1.6	242				Ftrt-15	
F	9/7/12	86	66			3	1.9	438				*2.03*	
Sa	9/8/12	81	62	7	0.57	13	3.7	265				*48*	
Su	9/9/12	75	54	13	0.13	9	1.4	171					
M	9/10/12	71	47		0.02	7	2.4	172					
Tu	9/11/12	72	44			3	2.2	104					
W	9/12/12	79	48			11	2	160					
Th	9/13/12	80	55			8	2.4	94					
F	9/14/12	79	59			12	2.8	144					
Sa	9/15/12	71	53	2	0.09	8	2.5	241					
Su	9/16/12	74	47			8	1.6	131					
M	9/17/12	76	48			11	2.3	170				RC Hvst	
Tu	9/18/12	72	59	17	2.54	19	5.7	30					
W	9/19/12	69	46	7	0.07	6	2.8	77					
Th	9/20/12	67	41			14	2.3	63					
F	9/21/12	69	49			18	2.1	58				Ftrt-15	
Sa	9/22/12	70	55	4	0.54	10	2.4	19				*3.42*	*0.81*
Su	9/23/12	67	41	8	0.02	11		242				*46*	*22*
M	9/24/12	66	41			12	1.7	130		Hvst-35			
Tu	9/25/12	70	43			6	3.7	434		*6.19*			
W	9/26/12	66	57	6	0.08	9	3.3	46					
Th	9/27/12	68	51			8	3.2	13					
F	9/28/12	56	47	23	1.39	10	1.8	11					
Sa	9/29/12	63	54	10	0.12	9	2.9	16					
Su	9/30/12	66	49	10	0.07	14	1.4	149					
M	10/1/12	69	45	8		9	4.1	10	Harvest		Hvst-33		
Tu	10/2/12	59	49	20	0.95	21	0.2	16			6.32		
W	10/3/12	63	54	19	0.03	23	0.2	62					
Th	10/4/12	67	57	23	0.13	22	0.5	43					
F	10/5/12	77	52	10	0.01	13	1.6	82				Hvst-cameo	
												3.34	
												141	

Apple Scab Infection Events (March 1 - September 6, 2012) as recorded by the NEWA Station at the Hudson Valley Lab in Highland, NY.

Start and end of wetting periods							
Start of wetting		End wetting		Total hours	Average temp (F)	Rainfall (in inches)	Split
Date	time	Date	time	of wetting	during wetting	during the wetting period	wetting period?
4/21/12	21:01	4/24/12	3:00	36	42	1.58	Yes
5/1/12	5:01	5/4/12	8:00	31	51	0.9	Yes
5/7/12	22:01	5/10/12	9:00	35	56	0.75	Yes
5/14/12	6:01	5/16/12	10:00	30	62	0.54	Yes
5/21/12	12:01	5/22/12	16:00	28	62	1.47	
5/26/12	18:01	5/28/12	8:00	21	66	0.18	Yes
5/29/12	18:01	5/31/12	2:00	20	65	0.97	Yes
6/1/12	22:01	6/2/12	11:00	13	58	0.74	
6/3/12	17:01	6/4/12	21:00	9	56	0.06	Yes
6/6/12	16:01	6/9/12	15:00	37	58	0.68	Yes
6/12/12	13:01	6/13/12	9:00	20	64	1.53	
6/25/12	0:01	6/25/12	23:00	14	62	0.4	Yes
7/4/12	3:01	7/4/12	23:00	9	71	0.24	Yes
7/15/12	14:01	7/16/12	8:00	18	70	0.6	
7/20/12	1:01	7/21/12	9:00	26	62	0.54	Yes
7/23/12	6:01	7/23/12	13:00	6	70	0.08	Yes
7/26/12	5:01	7/29/12	14:00	31	69	1.05	Yes
8/5/12	12:01	8/6/12	1:00	10	75	0.46	Yes
8/10/12	11:01	8/11/12	16:00	8	73	0.71	Yes
8/14/12	17:01	8/15/12	9:00	16	67	1.01	
8/17/12	19:01	8/18/12	9:00	14	66	0.24	
8/20/12	19:01	8/21/12	9:00	14	62	0.18	
8/27/12	15:01	8/28/12	9:00	16	70	1.33	Yes
9/4/12	16:01	9/5/12	11:00	19	72	0.65	

Dry conditions last 23 hours at download Download Time: 9/6/2012 10:00