

HUDSON VALLEY LAB PEAR INSECTICIDE SCREEN
PEAR BLOCK, HIGHLAND, NEW YORK 2011

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W E
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BL								
BO 7	BO 8	BO 9	BO 10	BO 11	BO 12	BO 2	BO 1	REP I
BL								
BO								
BL								
BO 6	BO 5	BO 4	BO 3	BO 1	BO 3	BO 9	BO 12	REP II
BL								
BO								
BL								
BO 6	BO 11	BO 7	BO 5	BO 8	BO 2	BO 4	BO 10	
BL								
BO	REP III							
BL								
BO 2	BO 9	BO 11	BO 5	BO 4	BO 6	BO 12	BO 7	
BL								
BO								
BL								
BO 10	BO 8	BO 3	BO 1	BO 3	BO 7	BO 10	BO 2	
BL								
BO	REP IV							
BL								
BO 1	BO 12	BO 4	BO 6	BO 5	BO 9	BO 11	BO 8	
BL								

Treatment & Form.	lb. ai./acre	oz. (gm/ml)/100 gal. dilute	Timing	Treatment & Form.	lb. ai./ac	oz.(gm/ml)/100 gal. dilute	Timing
1. BioCover Hort. oil		3% v/v	D	7. Esteem 35 WP		5.0 oz/A	DD
BioCover Hort. oil		1% v/v	WB, PF – EOS	Centaur 0.7 WDG+ 0.25% oil	46.0 oz/A	WB	
2. Surround WP	50.0 lbs./A	D, WB, PF		AgriMek 0.15EC+ 0.25% oil	16.0 fl oz/A	PF	
BioCover Hort. oil	1% v/v	2C – EOS		Delegate 25WG+ 0.25% oil	7.0 oz/A	14, 28dpPF	
3. Esteem 35 WP	5.0 oz/A	DD		8. Esteem 35 WP		5.0 oz/A	DD
Centaur 0.7 WDG+ 0.25% oil	46.0 oz/A	WB		Calypso 4F+ 0.25% oil	8.0 oz/A	WB, PF	
AgriMek 0.15EC+ 0.25% oil	16.0 fl oz/A	PF		Movento 240SC + 0.25% oil	9.0 fl oz/A	14, 28dpPF	
4. Esteem 35 WP	5.0 oz/A	DD		9. Esteem 35 WP		5.0 oz/A	DD
Centaur 0.7 WDG+ 0.25% oil	46.0 oz/A	WB		Actara 25WDG + 0.25% oil	5.5 oz/A	WB, PF	
AgriMek 0.15EC+ 0.25% oil	16.0 fl oz/A	PF		Delegate WG+ 0.25% oil	7.0 oz/A	14, 28dpPF	
HGW86 10SE + 0.25% oil	10.1 fl oz/A	14, 28dpPF		10. Esteem 35 WP		5.0 oz/A	DD
5. Esteem 35 WP	5.0 oz/A	DD		Assail 30SG + 0.25% oil	5.5 oz/A	WB, PF	
Centaur 0.7 WDG+ 0.25% oil	46.0 oz/A	WB		Delegate WG+ 0.25% oil	7.0 oz/A	14, 28dpPF	
AgriMek 0.15EC+ 0.25% oil	16.0 fl oz/A	PF		11. Esteem 35 WP		5.0 oz/A	DD
HGW86 10SE + 0.25% oil	13.5 fl oz/A	14, 28dpPF		Calypso 4F+ 0.25% oil	8.0 oz/A	WB, PF	
6. Esteem 35 WP	5.0 oz/A	DD		Delegate WG+ 0.25% oil	7.0 oz/A	14, 28dpPF	
Centaur 0.7 WDG+ 0.25% oil	46.0 oz/A	WB		12. UNTREATED			
AgriMek 0.15EC+ 0.25% oil	16.0 fl oz/A	PF					
HGW86 10SE + 0.25% oil	16.9 fl oz/A	14, 28dpPF					

400 gallons/A dilute vol. for concentrate calculations. Evaluations: Season long psylla egg, nymph & adult counts; phytotoxicity. BioCover horticultural oil used as the adjuvant in all treatments as tank mix at 0.25% v/v.

Treatment Schedule For Pear Psylla On Pear.
 N.Y.S.A.E.S. Hudson Valley Lab. Highland N.Y. - 2011.

Treatment/Formulation		Rate	Timing	Application Dates
1. BioCover Hort. oil Damoil	1.0% v/v	WB, PF-EOS BB	15 April; 19 May; 5, 17, 24 June 7 April	
	1.0% v/v			
2. Surround WP BioCover Hort. oil	50.0 lbs/A	D, WB, PF 2C-EOS	7, 15 April; 19 May 5, 17, 24 June	
	1% v/v			
3. Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil	46.0 oz/A	WB PF	15 April 19 May; 17 June	
	16.0 fl.oz/A			
4. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A	BB WB PF 14, 28dp PF	9 April 15 April 19 May 5, 17 June	
	46.0 oz/A			
	16.0 fl.oz/A			
	10.1 fl.oz/A			
5. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A	BB WB PF 14, 28, dpPF	9 April 15 April 19 April 5, 17 June	
	46.0 oz/A			
	16.0 fl.oz/A			
	13.5 fl.oz/A			
6. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A	BB WB PF 14, 28, dpPF	9 April 15 April 19 April 5, 17 June	
	46.0 oz/A			
	16.0 fl.oz/A			
	16.9 fl.oz/A			
7. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil Delegate 25WG + 0.25%oil	5.0 oz/A	BB WB PF 14, 28, dpPF	9 April 15 April 19 April 5, 17 June	
	46.0 oz/A			
	16.0 fl.oz/A			
	7.0 oz/A			
8. Esteem 35WP Calypso 4F + 0.25%oil Movento 240SC + 0.25%oil	5.0 oz/A	BB WB,PF 14, 28, dpPF	9 April 15 April; 19 May 5, 17 June	
	8.0 oz/A			
	9.0 fl.oz/A			
9. Esteem 35WP Actara 25WDG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A	BB W,BPF 14, 28, dpPF	9 April 15 April; 19 May 5, 17 June	
	5.5 oz/A			
	7.0 oz/A			
10. Esteem 35WP Assail 30SG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A	BB WB,PF 14, 28, dpPF	9 April 15 April; 19 May 5, 17 June	
	5.5 oz/A			
	7.0 oz/A			
11. Esteem 35WP Calypso 4F + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A	BB WB,PF 14, 28, dpPF	9 April 15 April; 19 May 5, 17 June	
	8.0 oz/A			
	7.0 oz/A			
12. Untreated Control				

Firewall + Regulade applied at 1 & 2C on 12 and 24 May for fireblight control.

**Table 10a Evaluations Of Insecticide Schedules For Controlling Early Season Insect Complex On Pear^A.
N.Y.S.A.E.S. Hudson Valley Lab. Highland N.Y. - 2011.**

Treatment / Formulation	Rate	Application Timing	<u>Mean number of Pear Psylla eggs present</u>				
			11 Apr	2 May	3 Jun	22Jun	
1. BioCover Hort. oil Damoil	1.0% v/v	WB, PF-EOS BB	0.2 a	0.1 a	2.9 a.b	0.9 ab	----
2. Surround WP BioCover Hort. oil	50.0 lbs/A 1% v/v	D, WB, PF 2C-EOS	0.0 a	0.1 a	3.8 ab	1.4 abc	
3. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A	BB WB PF	0.0 a	0.1a	4.0 ab	1.5 abc	
4. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 10.1 fl.oz/A	BB WB PF 14, 28 dpPF	----	----	2.8 ab	5.2 d	
5. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 13.5 fl.oz/A	BB WB PF 14, 28 dpPF	----	----	2.3 ab	2.2 bc	
6. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 16.9 fl.oz/A	BB WB PF 14, 28 dpPF	----	----	1.2 a	2.8 c	
7. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil Delegate 25WG + 0.25%oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 7.0 oz/A	BB WB PF 14, 28 dpPF	----	----	2.5 ab	1.4 abc	
8. Esteem 35WP Calypso 4F + 0.25%oil Movento 240SC + 0.25%oil	5.0 oz/A 8.0 oz/A 9.0 fl.oz/A	BB WB,PF 14, 28 dpPF	----	0.1 a	3.0 ab	0.7 a	
9. Esteem 35WP Actara 25WDG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 5.5 oz/A 7.0 oz/A	BB WB,PF 14, 28 dpPF	----	0.2 a	2.0 ab	0.9 a	
10. Esteem 35WP Assail 30SG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 5.5 oz/A 7.0 oz/A	DD WB,PF 14, 28 dpPF	----	0.5 a	4.2 b	0.8 ab	
11. Esteem 35WP Calypso 4F + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 8.0 oz/A 7.0 oz/A	BB WB,PF 14, 28 dpPF	----	0.3 a	2.5 ab	0.6 a	
12. Untreated			0.0 a	1.8 b	6.1	2.3 bc	
P value for transformed data			0.582	0.002	0.506	0.000	

Eggs

Table 10b Evaluations Of Insecticide Schedules For Controlling Early Season Insect Complex On Pear^A. N.Y.S.A.E.S. Hudson Valley Lab. Highland N.Y. - 2011.

Treatment / Formulation	Rate	Application Timing	Mean number of Pear Psylla nymphs present		
			2 May	3 Jun	22 Jun
1. BioCover Hort. oil Damoil	1.0% v/v	WB, PF-EOS BB	0.0 a	0.0 ab	0.4 ab
2. Surround WP BioCover Hort. oil	50.0 lbs/A 1% v/v	D, WB, PF 2C-EOS	0.0 a	0.1 ab	0.5 abc
3. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A	BB WB PF	0.0 a	0.2 ab	0.9 bcd
4. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 10.1 fl.oz/A	BB WB PF 14, 28 dpPF	----	0.2 ab	1.2 cd
5. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 13.5 fl.oz/A	BB WB PF 14, 28 dpPF	----	0.2 ab	0.9 bcd
6. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 16.9 fl.oz/A	BB WB PF 14, 28 dpPF	----	0.1 ab	1.3 d
7. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil Delegate 25WG + 0.25%oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 7.0 oz/A	BB WB PF 14, 28 dpPF	----	0.1 ab	0.5 abc
8. Esteem 35WP Calypso 4F + 0.25%oil Movento 240SC + 0.25%oil	5.0 oz/A 8.0 oz/A 9.0 fl.oz/A	BB WB, PF 14 28 dpPF	0.1 ab	0.0 a	0.4ab
9. Esteem 35WP Actara 25WDG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 5.5 oz/A 7.0 oz/A	BB WB, PF 14 28 dpPF	0.0 a	0.2 ab	0.1 a
10. Esteem 35WP Assail 30SG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 5.5 oz/A 7.0 oz/A	BB WB, PF 14, 28 dpPF	0.0 a	0.2 ab	0.2 a
11. Esteem 35WP Calypso 4F + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 8.0 oz/A 7.0 oz/A	BB WB,PF 14, 28 dpPF	0.0 a	0.4 b	0.1 a
12. Untreated			0.2 b	0.4 ab	0.5 abc
P value for transformed data	0.028	0.429	0.002		

Nymph

**Table 10c Evaluations Of Insecticide Schedules For Controlling Early Season Insect Complex On Pear.
N.Y.S.A.E.S., Hudson Valley Lab., Highland, N.Y. - 2011.**

Treatment	Formulation	Application Date	<u>Mean number of Pear Psylla adults present</u>	
			3 Jun	26 Jun
1. BioCover Hort. oil BioCover Hort. oil	3.0% v/v 1.0% v/v	D WB,PF-EOS	0.1 ab	0.0 abc
2. Surround WP BioCover Hort. oil	50.0 lbs/A 1% v/v	D,WB,PF 2C-EOS	0.2 c	0.0 ,b
3. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A	BB WB PF	0.1 abc	0.0 a
4. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 10.1 fl.oz/A	BB WB PF 14,28dpPF	0.1 abc	0.1 cd
5. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 13.5 fl.oz/A	BB WB PF 14,28dpPF	0.0 a	0.1 bcd
6. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil HGW86 10SE + 0.25% oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 16.9 fl.oz/A	BB WB PF 14,28dpPF	0.1 abc	0.1 cd
7. Esteem 35WP Centaur 0.7WDG + 0.25%oil AgriMek 0.15EC + 0.25%oil Delegate 25WG + 0.25%oil	5.0 oz/A 46.0 oz/A 16.0 fl.oz/A 7.0 oz/A	BB WB PF 14,28dpPF	0.1 abc	0.0 ab
8. Esteem 35WP Calypso 4F + 0.25%oil Movento 240SC + 0.25%oil	5.0 oz/A 8.0 oz/A 9.0 fl.oz/A	BB WB,PF	0.1 abc	0.0 ab
9. Esteem 35WP Actara 25WDG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 5.5 oz/A 7.0 oz/A	BB WB,PF 14,28dpPF	0.1 ab	0.0 ab
10. Esteem 35WP Assail 30SG + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 5.5 oz/A 7.0 oz/A	BB WB,P 14,28dpPF	0.2 b,c	0.0 ab
11. Esteem 35WP Calypso 4F + 0.25%oil Delegate WG + 0.25%oil	5.0 oz/A 8.0 oz/A 7.0 oz/A	BB WB,PF 14,28dppf	0.1 ab	0.0 ab
12. Untreated			0.4 d	0.1 d
P value for transformed data			0.001	0.012

Adult