combination of active ingredients and modes of action contained in the product.

Spotted Wing Drosophila

•Biology & Cultural

[17.1] This is an exotic species of vinegar fruit fly, a group normally attracted to damaged and rotting fruit. But in contrast to endemic Drosophila fruit flies, it has a serrated ovipositor and will lay eggs in intact ripening fruit on the tree; it is also a pest of berry fruit crops. Originally known from Japan, it has been found thoughout southern New England. Refer to the reference materials list (17.4.2, Other References) at the end of this publication for fact sheets containing details on the biology and management of this species.

Pesticide Application Notes

[17.2] Apply at first signs of adult activity. If repeated applications are necessary, rotate active ingredients to avoid promoting resistance in local populations. Delegate labeled for suppression only.

Stink Bugs (including Brown Marmorated Stink Bug)

Biology & Cultural

[18.1] A number of native stink bug species can sometimes cause fruit damage in all tree fruits under conditions that are not fully understood. Adult feeding during bloom and shuck split can cause the fruit to abort, and feeding later in the summer can cause a deep catfacing injury such as that caused by tarnished plant bug, or depressed, dimpled, corky or water-soaked areas on the skin. All tree fruits are attacked, especially peaches and apples. Other species of stink bugs are predators. Elimination of alternate host broadleaf weeds, especially legumes, in the orchard will contribute to management efforts. If control is needed, insecticides should be timed to kill immigrating adults as they appear in the orchards to prevent feeding damage and subsequent mating and egglaying.

The brown marmorated stink bug is an invasive species from Asia that was first documented in Allentown, PA in 2001. This insect has spread across a number of eastern US States, and now extends to the west coast as well. It was first documented in NY in the Hudson Valley Region in 2008. Although it can be found throughout NY in and around structures and vehicles, extensive monitoring efforts in 2011 and 2012 resulted in very few detections in agricultural crops; however, reports of sightings have been increasing. Refer to the reference materials list (17.4.2, Other References) at the end of this publication for fact sheets containing details on the biology and management of brown marmorated stink bug.

• Pesticide Application Notes

[18.2] Apply at first signs of infestation; BMSB are very mobile pests, and may reinfest the treated area quickly. If repeated applications are necessary, rotate active ingredients to avoid promoting resistance in local populations. *Actara, *Danitol, *Lannate, and *Vydate have FIFRA Section 2(ee) registrations for BMSB; the labeling must be in the possession of the user at the time of pesticide application. Only 1 application of *Vydate allowed per season. For best effectiveness and insecticide resistance management, the use of pre-mixes such as *Endigo, *Leverage and *Voliam Xpress should be reserved for those situations when the pest complex to be treated is appropriately matched to the combination of active ingredients and modes of action contained in the product.

Tarnished Plant Bug, Pear Plant Bug

Refer to the reference materials list at the end of this publication for a Fact Sheet containing details on the biology and management of this pest.

Pesticide Application Notes

[19.1] Recommended spray timing is from green cluster to white bud. . For best effectiveness and insecticide resistance management, the use of pre-mixes such as *Leverage or *Voliam Xpress should be reserved for those situations when the pest complex to be treated is appropriately matched to the combination of active ingredients and modes of action contained in the product. Suggested action threshold: plant bugs—3 bleeding sites/tree, or a cumulative catch of 7 adults by white bud stage (white sticky-board trap). See [12.7].

12.3 Pear Spray Table

Table 12.3.1. Pesticide Spray Table – Pears

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment: (see text)
Dormant						
Fire blight/spur	Bordeaux mixture, 8-8-100					[2.3]
blight	(copper sulfate)	8 lb/100 gal		24	BL	
	(spray lime)	8 lb/100 gal				
	plus					
	oil	1 qt/100 gal				

Refer to back of book for key to abbreviations and footnotes.

Pest		Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment (see text)
Dormant (conti		•					
Fire blight/spur	OR	C-O-C-S 8 lb	2-4 lb/100 gal		24	BL	_
blight (continued)	OR	Cuprofix Ultra 40 Disperss		7.5-10 lb./A pseudomonas/ 0.75 lb/acre fire blight	48	GT	_
	OR	Kocide 3000		5.25 – 7 lb/acre see comments	48	HIG	_
	OR	<pre>§Champ WG or other(§)coppers</pre>	see comments	8-16 lb./A	24	HIG	
Pear psylla, European red mite		(§)oil	3 gal/100 gal		12	0	[12.1]
Pearleaf blister		oil	1-1.5 gal/100 gal				[14.1]
mite		plus					
		*Diazinon 50WP	1 lb/100 gal		96	21	_
	OR	oil	1-1.5 gal/100 gal				
		plus					
		*Thionex 50WP	0.5-0.75 lb/100 gal	4 lb/acre	20 days	20	
		or *Thionex 3EC	0.33/0.5 qt/100 gal	2.67 qt/acre	7 days	7	
Swollen Bud							
Pear midge		Aza-Direct 1.2L	see label	11.5-42 fl oz/A	4	0	[11.1]
	OR	PyGanic 1.4EC	see label	16-64 fl oz/A	12	0	OR
Pear psylla		Actara 25WDG		5.5 oz/A	12	35	[12.2]
	OR	*Agri-Mek 0.15EC	2.5-5.0 fl oz/100 gal		12	28	[12.5]
	OR	*Calypso 4F	1-2 fl oz/100 gal		12	30	_
	OR	Delegate 25WG		6.0-7.0 oz./A	4	7	[12.5]
	OR	Esteem 35WP		4-5 oz/A	12	45	[12.5]
	OR	Movento 240SC		6-9 oz/acre	24	7	[12.5]
	OR	Portal 0.4EC		2 pt/acre	12	14	[12.5]
	OR	*Proaxis 0.5CS		2.6-5.1 fl oz/A	24	21	_
	OR	*Proclaim	0.8-1.2 oz/100	3.2-4.8 oz/A	12	14	_
		Nexter 75WS		6.6-10.7 oz/A	12	7	_
Insecticide with "	Fair"	efficacy rating for pear psylla	. Additional "Fair" op				
		Ambush EC (or equivalent dose of Perm-Up, Pounce)		12.8-25.6 fl oz/A	12	Pre- bloom	
Green Cluster							
Fabraea leaf spot		Same materials as recommer (except Fontelis and Merivor	n)				[1.2]
Pear scab		Topsin M WSB, 70WP	4 oz./100 gal	1 lb	48	1	[3.2]
		·	2.2 or /100 col		72	1	
		or Thiophanate-methyl 85WDG	3.2 oz./100 gal		12	1	

Pest	5	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment: (see text)
Green Cluster	(cont					(
Pear scab		or Procure 50WP	4 oz./100gal				
(continued)		or Inspire Super		8.5-12 fl oz	12	14	
		plus					
		Dithane/*Manzate/ Penncozeb 75DF	1 lb/100 gal		24	BL, 77 (A)	[3.3]
	OR	Dithane/*Manzate/ Penncozeb 75DF	1-2 lb/100 gal		24	BL, 77 (A)	[3.3]
	OR	Syllit		3 pt	48	7	_
	OR	Tebuzol 45DF	2 oz	4-8 oz	120	75	
	OR	Ziram 76DF	1.5-2 lb/100 gal		48	14	
	OR	Adament 50WG		4-5 oz	12	75	
	OR	Fontelis		14 to 20 fl oz	12	28	
	OR	Merivon		4.5 to 5 fl oz	12	0	
Pear Midge		§Aza-Direct 1.2L	see label	11.5-42 fl oz/A	4	0	[11.1]
	OR	§PyGanic 1.4EC	see label	16-64 fl oz/A	12	0	
Tarnished plant	_	*Asana XL 0.66EC	2-5.8 oz/100 gal		12	28	[19.1]
bug, plant bug	OR	*Baythroid XL 1E		2.0-2.4 fl oz/A	12	7	
	OR	Beleaf 50SG		2.0-2.8 oz/A	12	21	_
	OR	*Brigade 10WS		6.4-32 oz/A	12	14	
	OR	*Danitol 2.4EC		16-21.3 fl oz/A	24	14	_
	OR	*Guthion 50WS	0.5-0.75 lb/100 gal		14 days (E)	14-21(A)	-
	OR	*Pounce 3.2E		8-16 fl oz/A	12	PB	_
	OR	*Proaxis 0.5CS		2.6-5.1 fl oz/A	24	21	_
	OR	*Warrior II 2.08 CS		1.28-2.56 fl oz/A	24	21	
	and in speci-	ollowing pre-mix products are nsecticide resistance managem es present are appropriately ma ined in the product	ent, their use should b atched to the combinat	e reserved for situation of active ingre	ations whe	en multiple l modes of	pest
		*Leverage 360	see label	2.4-2.8 fl oz/A	12	7	_
White Bud	OR	*Voliam Xpress	see label	6-12 fl oz/A	24	21	
Fabraea leaf spot		See Green Cluster sprays					
Pear scab		Choose from materials listed	under Green Cluster				_
	OR	Flint 50WG	0.67-0.8 oz/100 gal		12	14	[3.4]
	OR	Sovran 50WG	1.0-1.6 oz/100 gal		12	30	_
Pear psylla		See Swollen Bud sprays					[12.2],
	OR	Centaur		34.5 to 46 oz	12	14	[12.4]
Bloom							
Fire blight		§Agri-mycin 17WP or Streptrol 17WP	0.5 lb/100 gal	24 oz./A	12	30	[2.1], [2.8]
Table continued of	on next						

Pest	5	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment: (see text)
Bloom (continu	ied)	Tout	Time 100 gai		(1115)	(uuys)	(see text)
Fire blight		or Firewall 17WP					
(continued)	OR	§Agri-mycin 17WP	0.25 lb/100 gal		12	30	[2.1],
		or Streptrol 17WP					[2.8]
		or Firewall 17WP					
		plus					
		Glycerine (CP or USP grade)	2 qt/100 gal				
		or Regulaid	0.25 pt/100 gal				_
	OR	Mycoshield	1.0 lb		12	60	[2.6]
	OR	§Serenade ASO		2-6 qt	4	0	[2.7]
	OR	§Bloomtime Biological FD		150 g	4	PF	[2.5]
Pear scab, Fabraea leaf		Choose from materials listed	previously				
spot			1			1.1	
Petal Fall							
Pear scab,		Choose from materials listed	previously				_
Fabraea leaf spot	OR	Vintage SC	2-4 fl oz/100 gal	6-12 oz/A	24	30	[3.5]
spor		plus					
		Manzate/ Penncozeb 75DF	1 lb/100 gal		24	BL/77(A)	[3.3]
	OR	Syllit		3 pt	48	7	
		plus					
		Manzate/ Penncozeb 75DF	1 lb/100 gal		24	BL/77(A)	[3.3]
	OR	Pristine 38WG		14.5-18.5 oz/A	12	0	_
	OR	Ziram 76DF	24-32 oz/100 gal		48	14	
Fire blight		Agrimycin 17WP,	8 oz/100 gal	24oz/A	12	30	[2.1],
		or Streptrol 17WP,					[2.8]
		or Firewall 17WP				•	-
	OR		8 oz/100 gal	24oz/A	12	30	[2.1], [2.8]
		or Streptrol 17WP,					[2.0]
		or Firewall 17WP					
		<i>plus</i> Glycerine (CP or USP grade)	2 qt/100 gal				
		or Regulaid	1 pt/100 gal				
Aphids,		Assail 30SG	- r	2.5-4.0 oz/A	12	7	
including spirea	OR	*Admire Pro 4.6SC	See label	2.8 fl oz	12	7	
aphid	OR	§Aza-Direct 1.2L		16-32 fl oz/A	4	0	
	OR	Beleaf 50SG		2.0-2.8 oz/A	12	21	
	OR	Calypso 4F	1-2 fl oz/100 gal		12	30	[5.2]
	OR	*Dimethoate 4EC	0.5 pt/100 gal		240	28	
	OR	§M-Pede 49L	1-2 gal/100gal		12	0	
	OR	Movento 240SC	00	6-9 oz/acre	24	7	[5.1]

Refer to back of book for key to abbreviations and footnotes.

Pest Petal Fall (cont	inue	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment (see text)
Aphids, including spirea aphid (continued)	The fand i are p	following pre-mix products ar nsecticide resistance managen resent and appropriately match ained in the product	nent, its use should be	reserved for situat	ions when a	multiple p	best species
		*Agri-Flex SC	1.5-2.0 fl oz/100 gal	5.5-8.5 fl oz/A	12	35	[7.3]
		plus					[]
		Horticultural spray oil	1 qt/100 gal				
	OR	1 2	see label	7 oz/A	12	35	_
		Leverage 360	See label	2.4-2.8 fl oz/acre	12	7	_
Codling moth		Pheromone disruption:	Sectaber	2.4-2.8 II 02/dele	12	1	[6.2]
Codling moth		Checkmate CM-F		2.4-4.8 oz/acre	12	7	[0.2]
Cometool						· · ·	[7 2]
Comstock mealybug	0.0	Actara 25WDG		4.5-5.5 oz/A	12	35	[7.3]
incurj sug	OR	Assail 30SG	1.2.9 /100 1	4.0-4.8 oz/A	12	7	
	OR	Calypso 4F	1-2 fl oz/100 gal	24546	12	30	
	OR	*Centaur	1 11 /1 00 1	34.5-46 oz/acre	12	14	[12.5]
	OR	*Diazinon 50WP	1 lb/100 gal		96	21	_
	OR	Movento 240SC		6-9 oz/acre	24	7	_
	OR	Portal 0.4EC		2 pt/acre	12	14	_
	OR	Admire Pro 4.6SC	see lablel	7 fl oz/A	12	7	[7.1]
	and spec	following pre-mix products an insecticide resistance manage bies are present and appropriat on contained in the product. *Agri-Flex SC	ment, their use should	be reserved for sit nbination of active	uations who	en multip	le pest
		plus	_				
		Horticultural spray oil	1 qt/100 gal	1 gal/A			_
	OR	*Voliam Flexi WDG	see label	7 oz/A	12	35	
Green		Altacor 35WDG		2.5-4 oz/acre	4	5	[9.1]
fruitworms	OR	*Asana XL 0.66EC	2-5.8 fl oz/100 gal		12	28	[9.1]
	OR	*Assail 30SG		4.0-8.0 oz/A	12	7	_
	OR	Baythroid XL 1E		1.4-2.0 fl oz/A	12	7	
	OR	Belt 4SC	See label	3-5 fl oz/A	12	14	_
	OR	*Lannate 2.4L	0.75 pt/100 gal		48-96(E)	7	_
	OR	*Proaxis 0.5CS	• •	2.6-5.1 fl oz/A	24	21	_
	OR	*Proclaim 5SG	0.8-1.2 oz/100 gal		12	14	_
	OR	*Thionex 50WP	1 lb/100		20 days	20	_
		or Thionex 3EC	21.3 oz/100 gal		7 days	20 7	
	OR	*Warrior 1CS		2.6-5.1 fl oz/A	24	21	_
		or *Warrior II 2.08 CS		1.28-2.56 fl oz/A	24	21	
	The	following pre-mix products an	re also labeled for use				ectiveness

The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, their use should be reserved for situations when multiple pest species present are appropriately matched to the combination of active ingredients and modes of action contained in the product.

Table continued on next page.

Pest		Product		Amt/A	REI (hrs)	PHI (deva)	Comment:
Petal Fall (con	tinued		Amt/100 gal	Allit/A	(III'S)	(days)	(see text)
Green		*Endigo ZC	See label	5-6 fl oz/acre	24	35	
fruitworms	OR	*Leverage 60	See label	2.4-2.8 fl oz/acre	12	7	_
(continued)	OR	*Voliam Flexi WDG	see label	4-7 oz/A	12	35	_
	OR	*Voliam Express	See label	6-12 flo oz/acre	24	21	
	OR	Tourismo		15 to 17 fl oz	12	14	
Pear psylla		Actara 25WDG		5.5 oz/A	12	35	[12.5]
	OR	Admire Pro 4.6CS	See label	7 fl oz/acre	12	7	
	OR	*Agri-Mek *SC	25.0 fl oz/100 gal	2.25-4.25 fl oz/acre	12	28	[12.5]
	OR	*Calypso 4F	1-2 fl oz/100 gal		12	30	
	OR	Delegate 25WG		6.0-7.0 oz./A	4	7	[12.5]
	OR	Esteem 35WP		4-5 oz/A	12	45	[12.5]
	OR	Movento 240SC		6-9 oz/acre	24	7	[12.5]
	OR	Portal 0.4EC		2 pt/acre	12	14	[12.5]
	OR	*Proaxis 0.5CS		2.6-5.1 fl oz/A	24	21	
	OR	*Proclaim	0.8-1.2 oz/100	3.2-4.8 oz/A	12	14	_
	OR	Nexter 75WS		6.6-10.7 oz/A	12	7	_
Insecticides with	"Fair'	' efficacy rating for pear psyllo Assail 30SG	a —	4.0-8.0 oz/A	12	7	
	OR	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal		12	28	_
	OR	*Baythroid XL 1E	<u> </u>	2.4-2.8 fl oz/A	12	7	_
	OR	Belay	1.5-3 oz/100 gal	6-12 oz/A	12	7	_
	OR	*Brigade 10WSB		6.4-32 oz/A	12	14	
		or *Brigade 2EC		2.6-12.8 fl oz/A	12	14	
	OR	*Centaur		34.5-46 oz/acre	12	14	
	OR	*Clutch	1.0-1.5 oz/100 gal	4-6 oz/acre	12	7	
	OR	*Danitol 2.4EC		16-21.3 fl oz/A	24	14	
	OR	*Leverage 2.7SE	see label	3.6-4.4 fl oz/A	12	7	
		or *Leverage 360	see label	2.4-2.8 fl oz/A	12	7	
	OR	§M-Pede 49L	1-2 gal/100 gal		12	0	_
	OR	§summer oil	1.5-2 gal/100 gal		4	0	_
	OR	§Surround 95WP		50 lb/A	4	0	_
	OR	Tourismo		12-17 fl oz/A	12	14	_
	OR	*Warrior		2.6-5.1 fl oz/A	24	21	_
	OR	*Warrior II		1.3-2.5 fl oz/A	24	21	[12.2]
	and in specie	ollowing pre-mix products are nsecticide resistance managem es are present and appropriatel ined in the product.	ent, their use should b	e reserved for situa	tions whe	n multiple	pest
		*Agri-Flex SC	1.5-2.0 fl oz/100 gal	5.5-8.5 fl oz/A	12	35	[12.5]
		<i>plus</i> Horticultural spray oil	1 qt/100 gal	1 gal/A			

Refer to back of book for key to abbreviations and footnotes.

Pest		Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Commen (see text)
Petal Fall (con	tinued	d)					
Pear rust mite		*Agri-Mek 0.15EC	2.5-5.0 fl oz/100 gal		12	28	[13.1]
	OR	Nexter 75WS	5.2-10.7 oz/A		12	7	_
	OR	Portal 0.4EC		2 pt/acre	12	14	[8.1]
	OR	*Vendex 50WP	6-8 oz/100 gal		48	14	
Plum curculio		Actara 25WDG		4.5-5.5 oz/A	12	35	
	OR	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal		12	28	
	OR	*Baythroid XL 1E		2.4-2.8 fl oz/A	12	7	_
	OR	*Brigade 10WSB		6.4-32 oz/A	12	14	
		or Brigade 2EC		2.6-12.8 fl oz/A	12	14	_
	OR	*Guthion 50WS	0.5-0.75 lb/100 gal		14 days(E)	14-21(A)	
	OR	Imidan 70WP	0.75-1 lb/100 gal		96	7	_
	OR	*Proaxis 0.5CS		2.6-5.1 fl oz/A	24	21	
	OR	§Surround 95WP		50 lb/A	4	0	[12.6]
	OR	*Warrior 1CS		2.6-5.1 fl oz/A	24	21	
		or *Warrior II 2.08 CS		1.28-2.56 fl oz/A	24	21	
		· Agn-riex SC		550510-7/1	10	25	[15 1]
		ined in the product. *Agri-Flex SC	1.5-2.0 fl oz/100 gal				
		1	1.5 2.0 II 02/100 gui	5.5-8.5 fl oz/A	12	35	[15.1]
		plus Horticultural spray oil			12	35	[15.1]
	OP	Horticultural spray oil	1 qt/100 gal	1 gal/A		_	[15.1]
	OR OP	Horticultural spray oil *Leverage 360	1 qt/100 gal See label	1 gal/A 2.4-2.8 fl oz/acre	12	7	[15.1] - -
	OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG	1 qt/100 gal See label see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A	12 12	7 35	[15.1] - -
Obliquebanded		Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express	1 qt/100 gal See label see label See label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre	12 12 24	7 35 21	[15.1] - -
	OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG	1 qt/100 gal See label see label See label see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A	12 12 24 4	7 35 21 5	[15.1] - -
	OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC	1 qt/100 gal See label see label See label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre	12 12 24 4 12	7 35 21 5 14	[15.1] - - -
	OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC	1 qt/100 gal See label see label See label see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A	12 12 24 4 12 4	7 35 21 5 14 0	[15.1] - - - -
	OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG	1 qt/100 gal See label see label See label see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A	12 12 24 4 12 4 4 4	7 35 21 5 14 0 7	[15.1] - - - - -
	OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG	1 qt/100 gal See label see label See label see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A	12 12 24 4 12 4 4 4 4 4 4	7 35 21 5 14 0 7 0	[15.1] - - - - - -
	OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF	1 qt/100 gal See label See label See label See label See label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A	12 12 24 4 12 4 4 4 4 4 4 4 4	7 35 21 5 14 0 7 0 0	[15.1] - - - - - -
	OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF Entrust 80WP	1 qt/100 gal See label see label See label See label See label 0.67-1.0 oz/100 gal	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A 2-3 oz/A	12 12 24 4 12 4 4 4 4 4 4	7 35 21 5 14 0 7 0	[15.1] - - - - - -
	OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF Entrust 80WP or Entrust 2SC	1 qt/100 gal See label See label See label See label See label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A 2-3 oz/A 6-10 fl oz/A	12 12 24 4 12 4 4 4 4 4 4 4 4 4	7 35 21 5 14 0 7 0 0 7 7	[15.1] - - - - - -
	OR OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF Entrust 80WP or Entrust 2SC Intrepid 2F	1 qt/100 gal See label see label See label See label See label 0.67-1.0 oz/100 gal	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A 2-3 oz/A 6-10 fl oz/A 8-16 fl oz/A	12 12 24 4 12 4 4 4 4 4 4 4 4	7 35 21 5 14 0 7 0 0 7 0 7 14	[15.1] - - - - - - -
	OR OR OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF Entrust 80WP or Entrust 2SC Intrepid 2F Javelin 7.5 WDG	1 qt/100 gal See label See label See label See label See label 0.67-1.0 oz/100 gal see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A 2-3 oz/A 6-10 fl oz/A	12 12 24 4 12 4	7 35 21 5 14 0 7 0 0 7 0 7 14 0	[15.1] - - - - - - -
	OR OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF Entrust 80WP or Entrust 2SC Intrepid 2F Javelin 7.5 WDG *Lannate 2.4L	1 qt/100 gal See label See label See label See label See label 0.67-1.0 oz/100 gal see label 0.75 pt/100 gal	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A 2-3 oz/A 6-10 fl oz/A 8-16 fl oz/A	12 12 24 4 12 4 4 4 4 4 4 4 4	7 35 21 5 14 0 7 0 0 7 0 7 14	[15.1] - - - - - - - - -
Obliquebanded leafroller	OR OR OR OR OR OR OR OR OR OR	Horticultural spray oil *Leverage 360 *Voliam Flexi WDG *Voliam Express Altacor 35WDG Belt 4SC Biobit XL 2.1FC Delegate 25WG §Deliver 18WG §Dipel 10.3DF Entrust 80WP or Entrust 2SC Intrepid 2F Javelin 7.5 WDG	1 qt/100 gal See label See label See label See label See label 0.67-1.0 oz/100 gal see label	1 gal/A 2.4-2.8 fl oz/acre 6-7 oz/A 6-12 oz/acre 2.5-4.5 oz/A 3-5 fl oz/acre 1.5-5.5 pt/A 4.5-7.0 oz/A 0.5-2 lb/A 0.5-2 lb/A 2-3 oz/A 6-10 fl oz/A 8-16 fl oz/A	12 12 24 4 12 4	7 35 21 5 14 0 7 0 0 7 0 7 14 0	[15.1]

The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, their use should be reserved for situations when multiple pest species present are appropriately matched to the combination of active ingredients and modes of action contained in the product.

Table continued on next page.

Pest		Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment (see text)
Obliquebanded	OR	*Endigo ZC	see label	5-6 fl oz/acre	24	35	
leafroller	OR	*Voliam Flexi WDG	see label	4-7 oz/A	12	35	<u>.</u>
(continued)	OR	*Voliam Xpress	see lablel	6-12 fl oz/acre	2	21	
	OR	Tourismo		15 to 17 fl oz	12	14	
Additional Sum	mer	Sprays					
Fire blight		§Agri-mycin 17WP	0.5 lb/100 gal		12	30	[2.4]
(ONLY after a		or Streptrol 17WP					
hailstorm)		or Firewall 17WP					
Pear scab, Fabraca loof		Topsin M 70WSB	4 oz/100 gal		72	1	_
Fabraea leaf spot,	OR	Thiophanate-methyl 85WDG	3.2oz/100 gal		72	1	
Sooty blotch, Black rot		plus:					
DIACK I UL		Dithane/*Manzate/Penncoz Cluster	zeb as listed for pear sca	b under Green	24	BL/77 (A)	[3.6]
	OR	Vintage SC <i>plus:</i>	3 fl oz/100 gal		24	30	
		Dithane/*Manzate/ Penncozeb 75DF	1 lb/100 gal		24	BL/77 (A)	[2.4]
	OR	Syllit <i>plus:</i>		3 pt	48	7	-
		Dithane/*Manzate/ Penncozeb 75DF	1 lb/100 gal		24	BL/77 (A)	[2.4]
	OR	Flint 50WG	0.67-0.8 oz/100 gal		12	14	[3.4]
	OR	Sovran 50WG	1.0-1.6 oz/100 gal		12	30	
	OR	Pristine 38WG		14.5-18.5 oz/A	12	0	_
	OR	Ziram 76DF	1.5-2 lb/100 gal		48	14	_
	OR	Fontelis (scab only)		14 to 20 fl oz	12	28	_
	OR	Merivon (scab only)		4.5 to 5 fl oz	12	0	
Codling moth		Altacor 35WDG	see label	2.5-4.5 oz/A	4	5	[6.1]
	OR	Assail 30SG		4.0-8.0 oz/A	12	7	[6.1]
	OR	Avaunt 30WDG	See label	5-6 oz/acre	12	28	
	OR	*Baythroid XL 1E		2.0-2.4 fl oz/A	12	7	_
	OR	§Biobit XL 2.1FC		1.5-5.5 pt/A	4	0	
	OR	*Calypso 4F	1-2 fl oz/100 gal		12	30	_
	OR	§Carpovirusine 0.99SC	0.5-1 pt/100 gal		4	0	_
	OR	§Cyd-X 0.06SC	1-6 fl oz/A	1-6 fl oz/A	4	0	_
	OR	*Danitol 2.4EC	16-21.3 fl oz/A	16-21.3 fl oz/A	24	14	_
	OR	Delegate 25WG	4.5-7.0 oz/A	4.5-7.0 oz/A	4	7	_
	OR	§Deliver 18WG	0.5-2 lb/A	0.5-2 lb/A	4	0	_
	OR	§Dipel 10.3DF	0.5-2 lb/A		4	0	_
	OR	§Entrust 80WP	0.67-1.0 oz/100 gal		4	7	
		or §Entrust 2SC	see label	6-10 fl oz/A			_
	OR	*Guthion 50WS	0.5-0.75 lb/100 gal		14 days (E)	14-21 (A)	

Pest		Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Commen (see text				
Additional Su	mmer	Sprays (continued)									
Codling moth	OR	Imidan 70WP	0.75-1 lb/100 gal		96	7	_				
continued)	OR	§Javelin 7.5WDG		0.5-4 lb/A	4	0					
	OR	*Leverage 2.7SE		3.6-4.4 fl oz/A	12	7					
		or *Leverage 360		2.4-2.8 fl oz/acre	12	7	_				
	OR	§Virosoft PC4	See label	2-3.2 fl oz/acre	4	0	_				
	OR	(§)Pheromone disruption:									
	Checkmate CM-F2.4-4.8 fl oz/acre40The following pre-mix products are also labeled for use against these pests; however, for best effectiveness										
	and in speci	nsecticide resistance managen es present are appropriately m ined in the product.	nent, their use should b	e reserved for situa	tions whe	en multiple	e pest				
	OR	*Endigo ZC	see label	5-6 fl oz/A	24	35	_				
	OR	*Leverage 360	see label	2.4-2.8 fl oz/A	12	7	_				
	OR	*Voliam Flexi WDG	see label	4-7 oz/A	12	35					
	OR	*Voliam Xpress	see label	6-12 fl oz/A	24	21					
	OR	Tourismo		15 to 17 fl oz	12	14	_				
Comstock		Actara 25WDG		4.5-5.5 oz/A	12	35	[7.1, 7.2				
nealybug	OR	*Admire Pro 4.6SC	see label	7.0 fl oz/A	12	7					
	OR	Assail 30SG		4.0-8.0 oz/A	12	7	_				
	OR	*Calypso 4F	1-2 fl oz/100 gal		12	30	_				
	OR	*Centaur	0	34.5-46 oz/acre	12	14	[12.5]				
	OR	*Diazinon 50WP	1 lb/100 gal		96	21					
	OR	Movento 240SC	see label	6-9 fl oz/A	24	7	_				
		Portal 0.4EC	see label	2 pt/A	12	14					
	and in speci	ollowing pre-mix products and nsecticide resistance managen es are present and appropriate ined in the product. *Agri-Flex SC <i>plus:</i>	nent, their use should b	e reserved for situation of active in	tions whe	en multiple	e pest				
		Horticultural spray oil	1 qt/100 gal	1 gal/A							
	0.0	*Voliam Flexi WDG	see label	7 oz/A	12	35	_				
	OR	VUIIaIII FIEXT WDU									
-	OR	*Agri-Mek 8SC	0.5-1 fl oz/100 gal	2.25-4.25 fl oz/A	12	28	[8.1], [13.1				
nite,					12	28					
nite, Wospotted pider mite,		*Agri-Mek 8SC Apollo 4SC		oz/A							
nite, Twospotted pider mite,	OR	*Agri-Mek 8SC Apollo 4SC		oz/A 4-8 oz/A	12	21					
nite, Wospotted pider mite,	OR OR	*Agri-Mek 8SC Apollo 4SC *Brigade 10WSB		oz/A 4-8 oz/A 12.8-32 oz/A 5.12-12.8 fl	12	21					
nite, Twospotted pider mite,	OR OR	*Agri-Mek 8SC Apollo 4SC *Brigade 10WSB or *Brigade 2EC Envidor 2SC		oz/A 4-8 oz/A 12.8-32 oz/A 5.12-12.8 fl oz/acre	12 12	<u>21</u> 14					
nite, Twospotted pider mite,	OR OR OR OR	*Agri-Mek 8SC Apollo 4SC *Brigade 10WSB or *Brigade 2EC Envidor 2SC		oz/A 4-8 oz/A 12.8-32 oz/A 5.12-12.8 fl oz/acre 16-18 fl oz/A	12 12 12	21 14 7					
European red nite, Fwospotted spider mite, Pear rust mite	OR OR OR OR	*Agri-Mek 8SC Apollo 4SC *Brigade 10WSB or *Brigade 2EC Envidor 2SC Portal 5EC		oz/A 4-8 oz/A 12.8-32 oz/A 5.12-12.8 fl oz/acre 16-18 fl oz/A 2 pt/A	12 12 12 12 12	21 14 7 14	[8.1], [13.1]				

Pest	<i>J</i>	<i>r key to abbreviations and foo</i> Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment (see text)
Additional Sun	nmer	Sprays (continued)					
European red	OR	Portal 0.4EC	see label	2 pt/A	12	14	
mite,	OR	Savey 50DF		3-6 oz/A	12	28	
Twospotted	OR	*Vendex 50WP	6-8 oz/100 gal		48	14	
spider mite, Pear rust mite	OR	Zeal 72WS		2-3 oz/A	12	14	
(continued)	and i are p	following pre-mix product is a nsecticide resistance managem resent and appropriately match nined in the product.	nent, its use should be i	reserved for situa	tions when i	nultiple p	est species
		*Agri-Flex SC	1.5-2.0 fl oz/100 gal	5.5-8.5 fl oz/A	12	35	[8.1]
		plus:					
		Horticultural spray oil	1 qt/100 gal	1 gal/A			
Obliquebanded		§Agree WG 3.8WS		1-2 lb/A	4	0	[10.2]
leafroller	OR	Altacor 35WDG	see label	2.5-4.5 oz/A	4	5	
	OR	*Baythroid XL 1E		2.4-2.8 fl oz/A	12	7	
	OR	*Belt 4SC	see label	3-5 fl oz/A	12	14	
	OR	§Biobit XL 2.1FC		1.5-5.5 pt/A	4	0	
	OR	Delegate 25WG		4.5-7.0 oz/A	4	7	_
	OR	§Deliver 18WG		0.5-2 lb/A	4	0	_
	OR	§Dipel 10.3DF		0.5-2 lb/A	4	0	_
	OR	§Entrust 80WP	0.67-1.0 oz/100 gal		4	7	
		or §Entrust 2SC	see label	6-10 fl oz/A			
	OR	Intrepid 2F		8-16 fl oz/A	4	0	_
	OR	§Javelin 7.5WDG		0.5-4 lb/A	4	0	_
	OR	*Lannate 2.4L	0.75 pt/100 gal		48-96(E)	7	
		or *Lannate 90SP	0.25 lb/100 gal				
	OR	*Proclaim 5SG	0.8-1.2 oz/100 gal		12	14	
	and in speci-	ollowing pre-mix products are nsecticide resistance managem es present are appropriately ma ined in the product.	ent, their use should be atched to the combinat	e reserved for situ ion of active ingr	ations when edients and	n multiple modes of	epest
		*Endigo ZC	see label	5-6 fl oz/A	24	35	_
	OR	*Leverage 360	see label	2.4-2.8 fl oz/A	12	7	_
	OR	*Voliam Flexi WDG	see label	4-7 oz/A	12	35	_
	OR	*Voliam Xpress	see label	6-12 fl oz/A	24	21	_
	OR	Tourismo	1	15 to 17 fl oz	12	14	F
Pear psylla		Choose from materials listed	under Petal Fall, exce			-	[12.5]
Pearleaf blister mite		Sevin XLR Plus, 4F		1.5-3 qt/A	12	3	[14.2]
inte	0.0	or Sevin 80S, *80WS	1.1.5 ma1/100 m 1	1.88-3.75 lb/A			_
	OR		1-1.5 gal/100 gal				
		<i>plus:</i> *Diazinon 50WP	1 lb/100 gal		96	21	
			1 10/100 201		20	41	

Refer to back of book for key to abbreviations and footnotes.

Pest		Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment (see text)
Additional Sur	nmer	Sprays (continued)					
Pearleaf blister		plus:					
mite (continued)		*Thionex 50WP	0.5-0.75 lb/100 gal	4 lb/acre	20 days	20	
		or *Thionex 3EC	0.33-0.5 qt/100gal	2.67 qt/acre	7 days	7	
Redbanded		§Agree WG 3.8WS		1-2 lb/A	4	0	[16.1]
leafroller	OR	*Altacor 35WDG		2.5-4.5 oz	4	5	_
	OR	*Baythroid XL 1E		2.4-2.8 fl oz/A	12	7	_
	OR	*Belt 4SC	see label	3-5 fl oz/A	12	14	_
	OR	§Biobit XL 2.1FC		1.5-5.5 pt/A	4	0	-
	OR	Delegate 25WG		4.5-7.0 oz/A	4	7	_
	OR	§Deliver 18WG		0.5-2 lb/A	4	0	_
	OR	§Dipel 10.3DF		0.5-2 lb/A	4	0	-
	OR	*Guthion 50WS	0.5-0.75 lb/100 gal		14 days (E)	14-21 (A)	_
	OR	Imidan 70WP	0.75-1 lb/100 gal		96	7	_
	OR	§Javelin 7.5WDG		0.5-4 lb/A	4	0	_
	-	*P 1: 59.0	0.9.1.2 = -100 = -1		12	14	-
	and in speci-	*Proclaim 5SG following pre-mix products nsecticide resistance manages present are appropriately ined in the product.	ement, their use should b	e reserved for situa	wever, for ations whe	r best effect en multiple	pest
	The f and in speci	ollowing pre-mix products nsecticide resistance manag es present are appropriately	are also labeled for use agement, their use should b	e reserved for situa	wever, for ations whe	r best effect en multiple	pest
	The f and in speci	ollowing pre-mix products nsecticide resistance manag es present are appropriately	are also labeled for use agement, their use should b	e reserved for situa	wever, for ations whe	r best effect en multiple	pest
	The f and in speci	following pre-mix products nsecticide resistance manag es present are appropriately ined in the product.	are also labeled for use ag ement, their use should b matched to the combinat	e reserved for situation of active ingre	wever, for ations whe dients and	r best effect en multiple l modes of	pest
	The f and in speci- conta	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo	are also labeled for use agreement, their use should be matched to the combinate see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz	wever, for ations who dients and 12 24 12	r best effect en multiple d modes of 7 21 14	pest
	The f and in speci- conta	ollowing pre-mix products associate resistance manages present are appropriately ined in the product. *Leverage 360 *Voliam Xpress	are also labeled for use ag ement, their use should b matched to the combinat	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A	wever, for ations who dients and 12 24	r best effect en multiple d modes of 7 21 14 7	pest
	The f and in speci- conta OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo	are also labeled for use agreement, their use should be matched to the combinate see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz	wever, for ations who dients and 12 24 12	r best effect en multiple d modes of 7 21 14	pest
	The f and in speci- conta OR OR	ollowing pre-mix products neecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG	are also labeled for use agement, their use should be matched to the combinate see label see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A	wever, for ations who dients and 12 24 12 4	r best effect en multiple d modes of 7 21 14 7	pest
	The f and in speci- conta OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP	are also labeled for use agreement, their use should be matched to the combinate see label see label see label see label see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A	wever, for ations who dients and 12 24 12 4	r best effect en multiple d modes of 7 21 14 7	pest
Drosophila	The f and in speci- conta OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC	are also labeled for use agement, their use should be matched to the combinate see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A	wever, for ations who dients and 12 24 12 4 4 4	r best effect en multiple d modes of 7 21 14 7 7 7	pest
Drosophila Stink bugs, including	The f and in speci- conta OR OR OR	ollowing pre-mix products neecticide resistance manages present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS	are also labeled for use agement, their use should be matched to the combinate see label see label see label see label see label 0.75-1 lb/100 gal	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A	wever, for ations who dients and 12 24 12 4 4 4 96	r best effect en multiple 1 modes of 7 21 14 7 7 7 7	pest
Drosophila Stink bugs, including Brown	The f and in specia conta OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A	wever, for ations who dients and <u>12</u> 24 12 4 4 4 96 12	r best effect en multiple d modes of 7 21 14 7 7 7 7 35	pest
Spotted wing Drosophila Stink bugs, including Brown marmorated stink bug	The f and in speci- conta OR OR OR OR OR	ollowing pre-mix products neecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12	r best effect en multiple 1 modes of 7 21 14 7 7 7 7 35 21	pest
Drosophila Stink bugs, including Brown marmorated	The f and ii specia conta OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2-2.4 fl oz/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12	r best effect en multiple 1 modes of 7 21 14 7 7 7 35 21 7	pest
Drosophila Stink bugs, including Brown marmorated	The f and ii specia conta OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2-2.4 fl oz/A 2.6-12.8 fl oz/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12	r best effect en multiple 1 modes of 7 21 14 7 7 7 35 21 7 14	pest
Drosophila Stink bugs, including Brown marmorated	The f and ii specia conta OR OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC or *Brigade 10WSB	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2-2.4 fl oz/A 2.6-12.8 fl oz/A 6.4-32 oz/A	wever, for ations who dients and 12 24 12 4 4 4 4 96 12 12 12 12 12 12 12 12	r best effect en multiple d modes of 7 21 14 7 7 7 35 21 7 14 14 14	pest
Drosophila Stink bugs, including Brown marmorated	The f and in specia conta OR OR OR OR OR OR OR OR OR	ollowing pre-mix products neecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC or *Brigade 10WSB *Danitol 2.4EC	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2.6-12.8 fl oz/A 2.6-12.8 fl oz/A 10.7-21.3 fl oz/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12 12 12 12 12 24	r best effect en multiple 1 modes of 7 21 14 7 7 7 35 21 7 14 14 14	pest
Drosophila Stink bugs, including Brown marmorated	The f and in specia conta OR OR OR OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC or *Brigade 10WSB *Danitol 2.4EC *Lannate 2.4LV	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4.10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2.6-12.8 fl oz/A 6.4-32 oz/A 10.7-21.3 fl oz/A 2.25 pt/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12 12 12 12 12 24 96	r best effect en multiple d modes of 7 21 14 7 7 7 35 21 7 14 14 14 14 14 7	pest
Drosophila Stink bugs, including Brown marmorated	The f and in specia conta OR OR OR OR OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC or *Brigade 10WSB *Danitol 2.4EC *Lannate 2.4LV or *Lannate 90SP	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2.6-12.8 fl oz/A 6.4-32 oz/A 10.7-21.3 fl oz/A 2.25 pt/A 0.75 lb/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12 12 12 12 12 24 96 96	r best effect en multiple d modes of 7 21 14 7 7 7 35 21 7 14 14 14 14 14 7 7	pest
Drosophila Stink bugs, including Brown marmorated	The f and in specia conta OR OR OR OR OR OR OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC or *Brigade 10WSB *Danitol 2.4EC *Lannate 2.4LV or *Lannate 90SP *Proaxis 0.5CS	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4.10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2.6-12.8 fl oz/A 2.6-12.8 fl oz/A 10.7-21.3 fl oz/A 2.25 pt/A 0.75 lb/A 2.6-5.1 fl oz/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12 12 12 12 12 24 96 96 24	r best effect en multiple d modes of 7 21 14 7 7 35 21 7 14 14 14 14 7 7 21	pest
Drosophila Stink bugs, including Brown	The f and in specia conta OR OR OR OR OR OR OR OR OR OR OR OR OR	ollowing pre-mix products nsecticide resistance manag es present are appropriately ined in the product. *Leverage 360 *Voliam Xpress Tourismo Delegate 25WG §Entrust 80WP or §Entrust 2SC *Imidan 70WS *Actara 25WDG *Asana XL 0.66EC *Baythroid XL 1EC *Brigade 2EC or *Brigade 10WSB *Danitol 2.4EC *Lannate 2.4LV or *Lannate 90SP *Proaxis 0.5CS §Surround 95WP *Vydate 2L	are also labeled for use agement, their use should be matched to the combinate see label see label see label 0.75-1 lb/100 gal see label 2.0-5.8 fl oz/100 gal see label see lab	e reserved for situation of active ingre 2.4-2.8 fl oz/A 6-12 oz 15 to 17 fl oz 4.5-7 oz/A 1.5-3 oz/A 4-10 fl oz/A 2.13-5.75 lb/A 4.5-5.5 oz/A 4.8-14.5 fl oz/A 2.6-12.8 fl oz/A 2.6-12.8 fl oz/A 10.7-21.3 fl oz/A 2.25 pt/A 0.75 lb/A 2.6-5.1 fl oz/A 2.5-50 lb/A	wever, for ations who dients and 12 24 12 4 4 4 96 12 12 12 12 12 12 12 12 12 12 12 12 24 96 96 24 4	r best effect en multiple d modes of 7 21 14 7 7 7 35 21 7 14 14 14 14 14 7 7 7 21 0	pest

Table continued on next page.

Refer to back of book for key to abbreviations and footnotes.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comment: (see text)
Additional Su	mmer Sprays (continued)					
Stink bugs, including Brown marmorated	The following pre-mix products ar and insecticide resistance manager species present are appropriately n contained in the product.	nent, their use should	be reserved for situ	ations wh	en multiple	e pest
stink bug	*Endigo ZC	see label	5-6 fl oz/A	24	35	_
(continued)	OR *Leverage 360	see label	2.4-2.8 fl oz/A	12	7	
	OR *Voliam Xpress	see label	6-12 fl oz/A	24	21	
	OR *Voliam Flexi WDG	see label	4-7 oz/A	12	35	—

Table 12.3.2. Growth Regulator Uses in Pears.

Refer to back of book for key to abbreviations and footnotes.

Timing Chemical Thinning	Product	Concentration	Rate of Formulated Product		
Petal Fall to 5-7 days after petal fall	Amid-Thin W	25-50 ppm	4-8 oz/100 gal		
For thinning Bartlett and Bosc. Apply at petal fall or within 5-7 days after petal fall.					
7-28 days after full bloom	Fruitone-N or Fruitone-L	10-15 ppm	4-6 oz/100 gal		

Directions for use on Bartlett and Bosc pears. NAA is more effective at early timings and should be applied as soon as fruit set is apparent for greatest success. Late applications may result in reduced fruit size. Do not apply when temperature is below 60°F or above 85°F. NAA will not usually adequately thin Bartlett, but the addition of a surfactant will improve thinning.

Fruit Size 8-14 mm(7-28 days after full bloom) Maxcel, RiteWay 125-200 ppm 4-6 oz/100 gal

Do not apply when temperature is below 60°F or above 85°F.

Induction of Lateral Branching in Young Trees					
1-2" of terminal shoot growth	Promalin, Perlan, Typy	125-1000 ppm	0.25-2 pt/5 gal		
Include a non-ionic surfactant and apply as a directed spray to areas where additional branching is desired. This practice is more effective in the second and third growing seasons after planting. Response on weak or low-vigor trees is usually disappointing. For nursery stock treat after trees have reached a terminal height at which lateral branching is desired.					
Preharvest Fruit Drop Control					
1-2 weeks before anticipated harvest	ReTain		0.74 lb/acre or 333 g/acre or (1 pouch)		
Apply in sufficient water to ensure thorough but not excessive coverage. An organosilicone surfactant (12 oz/100 gal) must be used with ReTain.					
5-7 days before harvest	Fruitone-N, Fruitone-L	10-15ppm	4-6 oz /100 gal		
Apply 7 days before harvest on D'Anjou, Bosc, and Bartlett. Make separate sprays to early and late maturing varieties.					
* To convert ounces to grams multiply ounces by 28.3. To convert fluid ounces to milliliters multiply fluid ounces by 29.57.					