



**FIGURE 14.1.1**  
**GROWTH STAGES IN PEACH**

- 1. Dormant**
- 2. Swollen bud**
- 3. Bud burst**
- 4. Pink**
- 5. Bloom**
- 6. Petal fall**
- 7a. Fruit set – shucks on**
- 7b. Fruit set – shucks off**

# 14 Peaches and Nectarines

## 14.1 Insecticides and Fungicides for Peaches and Nectarines

See Sections 14.2, 14.3, and 14.4 for comments related to this table.

**Table 14.1.1. Pesticide Spray Table – Peaches and Nectarines.**

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

*Refer to label for registration status before applying any pesticide to nectarines.*

<b>Pest</b>	<b>Product</b>	<b>Amt/100 gal</b>	<b>Amt/A</b>	<b>REI (hrs)</b>	<b>PHI (days)</b>	<b>Comments (see text)</b>
<b>Dormant</b>						
<b>Bacterial Spot</b>	C-O-C-S WDG	4.0 lb/100 gal	12-16 lb/A	24	PF	[1.2]
	Kocide 2000		6-12 lb/A	48	21	
	Kocide 3000		3.5-7.0 lb/A	48	0	
	Cuprofix Ultra 40D		5.0-7.5 lb/A	48	SS	
	§Champ WG		8-16 lb/A	48	21	
	or other (§)copper formulations (see label)					
<b>Peach leaf curl</b>	Bravo Ultrex 82.5WDG	0.9-1.25 lb/100 gal	2.8-3.8 lb/A	12 hr-	SS	[3.1]
	or Bravo Weather Stik 6F	1.0-1.4 pt/100 gal	3.1-4.1 pt/A	7days		
	or other chlorothalonil formulations (see labels)			(E)		
	C-O-C-S	4 lb/100 gal	12-16 lb/A	24	PF	
	or other (§)copper formulations; see labels					
	Echo 720	1.0-1.4 pt/100 gal	3.1-4.1 pt/A	12hr/7	SS	
	or Echo 90DF	0.75-1.2 lb/100 gal	2.25-3.5 lb/A	days		
				(E)		
	Ferbam Granuflo	1.5 lb/100 gal	4.5 lb/A	24	21	
	Kocide 2000		6-12 lb/A	48	21	
Kocide 3000		3.5-7.0 lb/A	48	0		
Thiram Granuflo	1.2 lb/100 gal	3.5 lb/A	24	7		
Ziram 76DF	1.25-2.7 lb/100 gal	3.75-8 lb/A	48	14		
<b>Phytophthora root, crown, and collar rots</b>	Ridomil Gold SL 4EC		2 qt/A	48	0	[6.2]
<b>Cottony peach scale, European fruit lecanium, San Jose scale, European red mite</b>	(§)oil	2-3 gal/100 gal		12	0	[11.1], [11.1],[12.1]
	Centaur		34.5 oz/A	12	14	
<b>Pink</b>						
<b>Brown rot (blossom blight)</b>	Bravo WeatherStik 6F	1.0-1.4 pt/100 gal	3.1-4.1 pt/A	12hr/7	SS	
	or other chlorothalonil formulations (see labels)			days		
				(E)		
	Captan 50WP	1-2 lb/100 gal	4-8 lb/A	24	0	
	or Captan 80WDG		2.5-5 lb/A	24	0	
	or Captan 4L	0.75-1 qt/100 gal		24	0	
	Echo 720	1.0-1.4 pt/100 gal	3.1-4.1 pt/A	12 hr/7	SS	
	or Echo 90DF	0.75-1.2 lb/100 gal	2.25-3.5 lb/A	days(E)		
	Elevate 50WDG		1.5 lb/A	12	0	
	Fontelis 1.67		14-20 fl oz/A	12	0	
	Gem 500SC		1.9-3.8 oz/A	12	1	[2.8]
Indar 2F		6 fl oz/A	12	0	[2.8]	
Inspire Super		16-20 fl oz/A	12	2		
Merivon		4.0-6.7 fl oz/A	12	0		

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

Refer to label for registration status before applying any pesticide to nectarines.

<b>Pest</b>	<b>Product</b>	<b>Amt/100 gal</b>	<b>Amt/A</b>	<b>REI (hrs)</b>	<b>PHI (days)</b>	<b>Comments (see text)</b>	
<b>Pink (continued)</b>							
<b>Brown rot (blossom blight) (continued)</b>	Meteor 4F		1-2 pt/A	24	PF		
	Pristine 38 WDG		10.5-14.5 oz/A	12	0		
	Quash 50WDG		2.5-3.5 oz/A	12	14		
	Rally 40WSP		2.5-6 oz/A	24	0	[2.8]	
	Rovral 4F		1-2 pt/A	24	PF	[2.3]	
	Scala SC		9-18 fl oz/A	12	2		
	Sulfur 92WP	5-10 lb/100 gal		24	0		
	§Microthiol Disperss or other (§)sulfur products	See labels		10-20 lb/A	24		
	Thiram Granuflo	1.2 lb/100 gal		3.5 lb/A	24	7	[2.3]
	Tilt 3.6 EC			4 fl oz/A	12	0	[2.8]
	Topsin M 70 WP, WSB or Topsin 4.5 Fl	0.33-0.5 lb/100 gal 6.7-10 fl oz/100 gal		1-1.5 lb/A 20-30 fl oz/A	48 48	1 1	
<b>Tarnished plant bug</b>	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	[21.1],[21.2]	
	Assail 30SG		5.3-8.0 oz/A	12	7		
	*Baythroid XL 1 EC		2.0-2.4 fl oz/A	12	7		
	Beleaf 50 SG		2.0-2.8 oz/A	12	14		
	*Pounce 25WP		6.4-16 oz/A	12	14		
	*Proaxis 0.5 CS		2.6-5.1 fl oz/A	24	14		
	*Warrior II 2.08 CS		1.3-2.5 fl oz/A	24	14		
	The following pre-mix product is also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.						
	*Voliam Xpress		6-12 fl oz/A	24	14		
<b>Bloom</b>							
<b>Brown rot (blossom blight)</b>	See materials listed under Pink						
<b>Oriental fruit moth</b>	See comments [16.1] regarding pheromone disruption						
<b>Petal Fall</b>							
<b>Brown rot (blossom blight)</b>	See materials listed under Pink						
						[2.5]	
<b>American plum borer, Peachtree borer, Lesser peachtree borer</b>	Asana XL 0.66Ec	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	[10.1]	
	*Baythroid XL 1EC		[see comment]	12	7	[10.2]	
	*Lorsban 4EC	3 qt/100 gal		96	14	[10.1]	
	or *Lorsban Advanced 3.8EC	3 qt/100 gal		96	14		
	or Lorsban 75 WG	4 lb/100		96	14		
	*Pounce 25WP		6.4-16.0 oz/A	12	14	[10.2]	
	*Proaxis		2.6-5.1 fl oz/A	24	14		
	Scorpion		5.25-7 fl oz/A	12	7	[10.3]	
	*Warrior II		1.3-2.6 fl oz/A	24	14		
	(§)Pheromone disruption ties: Isomate PTB-Dual		150 ties/A			[17.1]	

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Refer to label for registration status before applying any pesticide to nectarines.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)
<b>Petal Fall (continued)</b>						
<b>American plum borer, Peachtree borer, Lesser peachtree borer (continued)</b>	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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	*Leverage 360		2.4-2.8 fl oz/A	12	7	
	*Voliam Xpress		6-12 fl oz/A	24	14	
<b>Green peach aphid</b>	Actara		3.0-4.0 oz/A	12	14	[13.1]
	Assail 30SG		2.5-5.3 oz/A	12	7	
	Beleaf 50SG		2.0-2.8 oz/A	12	14	
	*Lannate LV 2.4L	0.75 pt/100 gal	3 pt/A	96	4	[13.1]
	or *Lannate 90SP	0.25 lb/100 gal	1 lb/A	96	4	
	Movento SC		6.0-9.0 fl oz/A	24	7	[13.1]
	The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	Voliam Flexi WDG		4.0-7.0 oz/A	12	14	
	<b>Oriental fruit moth</b>	See materials listed under Shuck Split				
<b>Tarnished plant bug</b>	See materials listed under Pink plus					
	Actara		4.5-5.5 oz/A	12	14	[21.3]
	Belay 2.1 EC		6 fl oz/A	12	21	[21.3]
	The following pre-mix product is also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Leverage 360		2.4-2.8 fl oz/A	12	7	
<b>Western flower thrips</b>	Actara 25WDG		4.5-5.5 oz/A	12	14	
	Delegate 25 WG		4.5-7 oz/A	4	1	
	§Entrust 80WP	0.4-0.8 oz/100 gal	1.25-2.5 oz/A	4	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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	Voliam Flexi		4.0-7.0 oz/A	12	14	
	*Voliam Express		6-12 fl oz/A	24	14	
<b>Shuck Split</b>						
<b>Brown rot</b>	Bravo WeatherStik 6F	1.0-1.4 pt/100 gal	3.1-4.1 pt/A	12hr/7 days(E)	SS	[2.6]
	or other chlorothalonil formulations (see labels)					
	Captan 50WP	1-2 lb/100 gal	4-8 lb/A	24	0	
	or Captan 80 WDG		2.5-5 lb/A	24	0	
	or Captec 4L	0.75- 1 qt/100 gal		24	0	
	Echo 720	1.0-1.4 pt/100 gal	3.1-4.1 pt/A	12hr/7 days(E)	SS	
or Echo 90DF	0.75-1.2 lb/100 gal	2.25-3.5 lb/A		SS		
Elevate 50WDG		1.5 lb/A	12	0		

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Refer to label for registration status before applying any pesticide to nectarines.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)	
<b>Shuck Split (continued)</b>							
<b>Brown rot</b> (continued)	Fontelis 1.67		14-20 fl oz/A	12	0		
	Indar 2F		6 fl oz/A	12	0	[2.8]	
	Inspire Super		16-20 fl oz/A	12	2		
	Merivon		4.0-6.7 fl oz/A	12	0		
	Pristine 38WDG		10.5-14.5 oz/A	12	0		
	Quash 50 WDG		2.5-3.5 oz/A	12	14		
	Rally 40WSP		2.5-6 oz/A	24	0	[2.8]	
	Sulfur 92WP	5-10 lb/100 gal		24	0	[2.6]	
	§Microthiol Disperss or other (§)sulfur products	See labels		10-20 lb/A	24	0	
	Thiram Granuflo	1.2 lb/100 gal		3.5 lb/A	24	7	
	Tilt 3.6EC			4 fl oz/A	12	0	[2.8]
	Topsin M 70 WP, WSB	0.33-0.5 lb/100 gal		1-1.5 lb/A	48	1	
	Topsin 4.5 FL	6.7-10 fl oz/100 gal		20-30 fl oz/A	48	1	
	<b>Bacterial spot</b>	§Mycoshield 17WP	12 oz/100 gal		12	21	[1.3]
FireLine 17 WP		12 oz/100 gal		12	21		
(§)copper products		See comments				[1.4]	
<b>Peach scab</b>	Bravo Ultrex 82.5WDG or Bravo Weather Stik 6F or other chlorothalonil formulations (see labels)	0.9-1.25 lb/100 gal 1.0-1.4 pt/100 gal	2.8-3.8 lb/A 3.1-4.1 pt/A	12 hr/7 days(E)	SS	[4.2]	
	Echo 720 or Echo 90DF	1.0-1.4 pt/100 gal 0.75-1.2 lb/100 gal	3.1-4.1 pt/A 2.25-3.5 lb/A	12hr/7 days(E)	SS SS		
	Captan 50WP or Captan 80 WDG or Captec 4L	1-2 lb/100 gal 0.75-1 qt/100 gal	4-8 lb/A 2.5-5 lb/A	24 24	0 0		
	Gem 500SC		1.9-3.8 oz/A	12	1		
	Indar 2F		6 fl oz/A	12	0		
	Inspire Super		16-20 fl oz/A	12	2		
	Sulfur 92WP or §Microthiol Disperss 80DF or other (§)sulfur products	5-10 lb/100 gal See labels		6-12 lb/A	24 24	0 0	
	Quash		2.5-3.5 oz/A	12	14		
	Thiram Granuflo	1.2 lb/100 gal		3.5 lb/A	24	7	[2.3]
	Topsin M 70WP <i>plus</i> Captan 80 WDG			0.5-0.75 lb/A 1.25-2.5 lb/A	48 24	1 0	
	<b>Obliquebanded leafroller</b>	Altacor 35 WDG		3.0-4.5 oz/A	4	10	[15.1]
		*Baythroid XL 1EC		2.4-2.8 fl oz/A	12	7	
		Belt SC		3.0-4.0 fl oz/A	12	7	
		§Biobit HP		0.5-2.0 lb/A	4	0	
		*Danitol 2.4EC		10.7-21.3 fl oz/A	24	3	
		Delegate 25 WG		4.5-7.0 oz/A	4	1	[15.1]
§Deliver			0.5-2.0 lb/A	4	0		
§Dipel DF			0.5-2.0 lb/A	4	0		
§Entrust 80WP		0.4-0.8 oz/100 gal		1.25-2.5 oz/A	4	1	[15.1]

**Table 14.1.1. Pesticide Spray Table – Peaches and Nectarines.**

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Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)
<b>Shuck Split (continued)</b>						
<b>Obliquebanded leafroller (continued)</b>	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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Leverage 360		2.4-2.8 fl oz/A	12	7	
	Tourismo		10-14 fl oz/A	12	14	
	*Voliam Xpress		6-12 fl oz/A	24	14	
<b>Oriental fruit moth,</b>	Actara		4.5-5.5 oz/A	12	14	[16.2]
	Altacor 35 WDG		3.0-4.5 oz/A	4	10	[16.2],[17.2]
<b>Lesser peachtree borer,</b>	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	
	Assail 30SG		5.3-8.0 oz/A	12	7	[17.2]
<b>Plum curculio</b>	Avaunt 30WDG		5.0-6.0 oz/A	12	14	[16.2]
	§Aza-Direct 1.2L		1-2 pts/A	4	0	
	Azatin XL 3L		10-21 fl oz/A	4	0	
	*Baythroid XL 1EC					[10.2],[17.3]
	for lesser peachtree borer:		1.4-2.0 fl oz/A	12	7	
	for oriental fruit moth:		2.0-2.4 fl oz/A	12	7	
	for plum curculio:		2.4-2.8 fl oz/A	12	7	
	Belay		6.0 fl oz/A	12	21	[18.1],[16.2],[17.2]
	Belt SC		3.0-4.0 fl oz/A	12	14	[16.2]
	*Danitol 2.4EC		10.7-21.3 fl oz/A	24	3	
	Delegate 25WG		6.0-7.0 oz/A	4	1	[16.2]
	Imidan 70W	0.75-1.0 lb/100 gal	2.1-4.25 lb/A	96	14	[16.4]
	Intrepid 2F		10-16 fl oz/A	4	7	[16.2]
	*Pounce 25WP		6.4-16.0 oz/A	12	14	[10.2]
	*Proaxis 0.5CS		2.6-5.1 fl oz/A	24	14	
	Sevin XLR Plus, 4F		2-3 qt/A	12	3	
	§Surround 95WP		25-50 lb/A	4	0	[18.2]
	*Warrior II		1.3-2.6 fl oz/A	24	14	
	(§)Pheromone disruption:					
	§Checkmate OFM Dispenser		100-200 dispensers/A			[16.1]
	or Checkmate OFM Flowable		1.3-2.9 fl oz/A			[16.1]
	or Isomate-M 100		100 ties/A			[16.1]
	or Isomate PTB-Dual		150 ties/A			[17.1]
	The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	*Leverage 360		2.4-2.8 fl oz/A	12	7	
	Tourismo		10-14 fl oz/A	12	14	
	Voliam Flexi		4.0-7.0 oz/A	12	14	
	*Voliam Xpress		6-12 fl oz/A	24	14	

**Table 14.1.1. Pesticide Spray Table – Peaches and Nectarines.**

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

Refer to label for registration status before applying any pesticide to nectarines.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)
<b>Shuck Split (continued)</b>						
San Jose Scale, Lecanium Scale	Centaur		34.5-46.0 oz/A	12	14	[11.2]
	Admire Pro		1.4-2.8 fl oz/A	12	0	
	Esteem 0.86EC		13-16 fl oz/A	12	14	
	Movento		6.0-9.0 fl oz/A	24	7	
Tarnished plant bug	See materials listed under Petal Fall					
<b>Additional Summer Sprays</b>						
Bacterial spot	§Mycoshield 17WP	12 oz/100 gal		12	21	[1.3]
	FireLine 17WP	12 oz/100 gal		12	21	
	(§)copper products	See comments				[1.4]
Brown rot	Captan 50WP	1-2 lb/100 gal	4-8 lb/A	24	0	[2.8]
	or Captan 80 WDG		2.5-5 lb/A	24	0	
	or Captec 4L	0.75-1 qt/100 gal		24	0	
	Elevate 50WDG		1.5 lb/A	12	0	
	Fontelis 1.67		14-20 fl oz/A	12	0	
	Indar 2F		6 fl oz/A	12	0	
	Inspire Super		16-20 fl oz/A	12	2	
	Merivon		4.0-6.7 fl oz/A	12	0	
	Pristine 38WDG		10.5-14.5 oz/A	12	0	
	Quash 50WDG		2.5-4.0 oz/A	12	14	
	Rally 40WSP		2.5-6 oz/A	24	0	
	Thiram Granuflo	1.2 lb/100 gal	3.5 lb/A	24	7	[2.3]
	Tilt 3.6EC		4 fl oz/A	12	0	
	Sulfur 92WP	5-10 lb/100 gal		24	0	
	§Microthiol Disperss or other (§)sulfur products	See labels		10-20 lb/A	24	0
Peach scab	Captan 50WP	1-2 lb/100 gal	4-8 lb/A	24	0	[4.2]
	or Captan 80 WDG		2.5-5 lb/A	24	0	
	or Captec 4L	0.75-1 qt/100 gal		24	0	
	Gem 500SC		1.9-3.8 oz/A	12	1	
	Inspire Super		16-20 fl oz/A	12	2	
	Sulfur 92WP	6-8 lb/100 gal		24	0	
	or §Microthiol Disperss 80DF		6-12 lb/A	24	0	
	Thiram Granuflo	1.2 lb/100 gal	3.5 lb/A	24	7	[2.3]
	Topsin M 70WP		0.5-0.75 lb/A	48	1	
plus: Captan 80 WDG		1.25-2.5 lb/A	24	0		
Powdery mildew (rusty spot)	Sulfur 92WP	5-10 lb/100 gal		24	0	[7.2]
	§Microthiol Disperss		10-20 lb/A	24	0	
	Inspire Super		16-20 fl oz/A	12	2	
	Quintec 2.08EC		7 fl oz/A	12	7	
European red mite, Twospotted spider mite	Acramite 50WS		0.75-1.0 lb/A	12	3	[12.2]
	Apollo 4SC		2.0-8.0 oz/A	12	21	
	Envidor 2SC		16-18 fl oz/A	12	7	[12.2]
	Nexter 75WS		4.4-10.7 oz/A	12	7	[12.2]
	Onager 1EC		12-24 fl oz/A	12	28	
	Portal		2 pts/A	12	365	[12.3]

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Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)
<b>Additional Summer Sprays (continued)</b>						
European red mite,	Savey 50DF		3.0-6.0 oz/A	12	28	
	*Vendex 50WP		1.0-2.0 lb/A	48	14	
Twospotted spider mite (continued)	Zeal 72 WS		2.0-3.0 oz/A	12	7	
Green peach aphid	Actara		3.0-4.0 oz/A	12	14	[13.1]
	Admire Pro		1.4-2.8 fl oz/A	12	0	
	Assail 30SG		2.5-5.3 oz/A	12	7	
	Beleaf 50SG		2.0-2.8 oz/A	12	14	
	*Lannate LV 2.4L	0.75 pt/100 gal	3 pt/A	96	4	[13.1]
	or *Lannate 90SP	0.25 lb/100 gal	1 lb/A	96	4	
	Movento		6.0-9.0 fl oz/A	24	7	
The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.						
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	Voliam Flexi WDG		4.0-7.0 oz/A	12	14	
Japanese Beetle	Admire Pro		1.4-2.8 fl oz/A	12	0	[14.2]
	Assail 30SG		5.3-8.0 oz/A	12	7	
	Imidan 70W	0.75-1.0 lb/100 gal	2.1-4.25 lb/A	4-14 days	14	[14.3]
	Sevin XLR Plus, 4F		2-3 qt/A	12	3	
	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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	*Leverage 360		2.4-2.8 fl oz/A	12	7	
	*Voliam Express		6-12 fl oz/A	24	14	
Lecanium scale, San Jose scale	Admire Pro		1.4-2.8 fl oz/A	12	0	[11.2]
	Centaur		34.5-46 oz/A	12	14	
	Esteem 0.86EC		13-16 fl oz/A	12	14	
	Movento		6.0-9.0 fl oz/A	24	7	
Oriental fruit moth	(§)Pheromone disruption: §Checkmate OFM Dispenser		100-200 dispensers/A			[16.1]
	or Checkmate OFM Flowable or Isomate-M 100		1.3-2.9 fl oz/A 100 ties/A			
	Altacor 35 WDG		3.0-4.5 oz/A	4	10	[16.2],
	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	[16.3]
	Assail 30SG		5.3-8.0 oz/A	12	7	
	Avaunt 30 WDG		5.0-6.0 oz/A	12	14	
	*Baythroid XL 1L		2.0-2.4 fl oz/A	12	7	
	Belt SC		3.0-4.0 fl oz/A	12	14	
	*Danitol 2.4EC		10.7-21.3 fl oz/A	24	3	
	Delegate 25 WG		6.0-7.0 oz/A	4	1	



**Table 14.1.1. Pesticide Spray Table – Peaches and Nectarines.**

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

Refer to label for registration status before applying any pesticide to nectarines.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)	
<b>Additional Summer Sprays (continued)</b>							
<b>Oriental fruit moth</b> (continued)	§Entrust 80WP	0.4-0.8 oz/100 gal	1.25-2.5 oz/A	4	1		
	Imidan 70W	0.75-1.0 lb/100 gal	2.1-4.25 lb/A	14 days	14	[16.4]	
	Intrepid 2F		10-16 fl oz/A	4	7		
	Proaxis 0.5CS		2.6-5.1 fl oz/A	24	14		
	Sevin XLR Plus, 4F		2-3 qt/A	12	3		
	*Warrior II		1.3-2.6 fl oz/A	24	14		
	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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.						
		*Endigo ZC		5-5.5 fl oz/A	24	14	
		*Leverage 360		2.4-2.8 fl oz/A	12	7	
		Tourismo		10-14 fl oz/A	12	14	
		Voliam Flexi WDG		4.0-7.0 oz/A	12	14	
	*Voliam Xpress		6-12 fl oz/A	24	14		
<b>American plum borer, Peachtree borer, Lesser Peachtree borer</b>	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	[17.3]	
	*Baythroid XL 1EC		1.4-2.0 fl oz/A	12	7		
	*Lorsban 4EC	3 qt/100 gal		96	14		
	or Lorsban 75WG	4 lb/100 gal		96	14		
	or *Lorsban Advanced 3.8EC	3 qt/100 gal		96	14		
	*Pounce 25WP		6.4-16 oz/A	12	14		
	Proaxis 0.5CS		2.6-5.1 fl oz/A	24	14		
	*Warrior II		1.3-2.6 fl oz/A	24	14		
	The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.						
		*Endigo ZC		5-5.5 fl oz/A	24	14	
		*Leverage 360		2.4-2.8 fl oz/A	12	7	
	*Voliam Xpress		6-12 fl oz/A	24	14		
<b>Spotted wing Drosophila</b>	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	[19.3]	
	Actara		4.5-5.5 oz/A	12	14		
	Admire Pro		1.4-2.8 oz/A	12	0		
	Assail	5.3-8 oz/100 gal		12	7		
	*Baythroid XL		2.4-2.8 fl oz/A	12	7		
	*Danitol 2.4EC		10.7-21.3 fl oz/A	24	3		
	Delegate 25WG		6-7 oz/A	4	1		
	*Diazinon AG500	1 pt/100 gal		96	21		
	§Entrust 80WP	0.4-0.8 oz/100 gal	1.25-2.5 oz/A	4	1		
	Imidan 70W	0.75-1 lb/100 gal	2.13-4.25 lb/A	96	14	[19.4]	
	*Lannate 2.4LV		3 pt/A	96	4	[19.3]	
	or *Lannate 90SP		1 lb/A	96	4		
	Malathion 5EC		2.5-4.8 pts/A	24	7		
	Mustang Max		4 oz./A	12	14		
	Pyganic		1 pt- 2 qt/A	12	0	[19.3]	
	Sevin XLR Plus		2-3 qts/A	12	3		

**Table 14.1.1. Pesticide Spray Table – Peaches and Nectarines.**

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

Refer to label for registration status before applying any pesticide to nectarines.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)
<b>Additional Summer Sprays (continued)</b>						
<b>Spotted wing Drosophila (continued)</b>	Venom		2-4 oz	12	3	[19.5]
	The following pre-mix product is 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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Leverage 360		2.4-2.8 fl oz/A	12	7	
<b>Stink bugs, including Brown marmorated stink bug</b>	Actara		3.0-4.0 oz/A	12	14	[20.2]
	Assail 30SG		5.3-8.0 oz/A	12	7	
	Belay		6.0 fl oz/A	12	21	[20.2]
	*Danitol 2.4EC		10.7-21.3 fl oz/A	24	3	[20.2]
	*Lannate 2.4LV		2.25 pt/A	96	4	[20.2]
	or *Lannate 90SP		0.75 lb/A	96	4	
	Scorpion		5.25-7 fl oz/A	12	3	
	*Warrior IICS		1.28-2.56 fl oz/A	24	14	
	The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
*Leverage 360		2.4-2.8 fl oz/A	12	7		
Voliam Flexi		6-7 fl oz/A	12	14		
<b>Tarnished plant bug</b>	Actara		4.5-5.5 oz/A	12	14	[21.2, 21.3]
	*Asana XL 0.66EC	2.0-5.8 fl oz/100 gal	4.8-14.5 fl oz/A	12	14	
	Assail 30SG		5.3-8.0 oz/A	12	7	
	*Baythroid XL 1 L		2.0-2.4 fl oz/A	12	7	
	Belay 2.1 EC		6 fl oz/A	12	21	[21.3]
	Beleaf 50SG		2.0-2.8 oz/A	12	14	
	*Danitol 2.4EC		10.7-21.3 fl oz/A	24	3	
	*Lannate LV 2.4L	0.75 pt/100 gal	3 pt/A	96	4	[21.3]
	or *Lannate 90SP	0.25 lb/100 gal	1 lb/A	96	4	
	*Pounce 25WP		6.4-16.0 oz/A	12	14	
	Proaxis 0.5CS		2.6-5.1 fl oz/A	24	14	
	*Warrior II 2.08 CS		1.3-2.5 fl oz/A	24	14	
	The following pre-mix products are also labeled for use against this pest; however, for best effectiveness and insecticide resistance management, its use should be reserved for situations when multiple pest species are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
*Leverage 360		2.4-2.8 fl oz/A	12	7		
Voliam Flexi WDG		4.0-7.0 oz/A	12	14		
*Voliam Xpress		6-12 fl oz/A	24	14		
<b>Western flower thrips</b>	Actara 25WDG		4.5-5.5 oz/A	12	14	[22.2]
	§Entrust 80WP		1.25-2.5 oz/A	4	1	
	Delegate WG		4.5-7 oz/A	4	1	

**Table 14.1.1. Pesticide Spray Table – Peaches and Nectarines.**

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

Refer to label for registration status before applying any pesticide to nectarines.

Pest	Product	Amt/100 gal	Amt/A	REI (hrs)	PHI (days)	Comments (see text)
<b>Additional Summer Sprays (continued)</b>						
<b>Western flower thrips (continued)</b>	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 are present and appropriately matched to the combination of active ingredients and modes of action contained in the product.					
	*Endigo ZC		5-5.5 fl oz/A	24	14	
	Voliam Flexi WDG		4.0-7.0 oz/A	12	14	
	*Voliam Xpress		6-12 oz/A	24	14	
<b>X-Disease</b>	Remove chokecherries	See comments				[9.1], [9.2]
<b>Control of Storage Disorders</b>						
<b>Storage rots</b>	Scholar SC	16 fl oz/100 gal (see comments & label)				[23.1]
<b>After Harvest, Before Leaf Drop</b>						
<b>Prunus stem pitting virus</b>	Product 2,4-D as described in the weed control section for “Dandelion and other broadleaf weeds in sod cover”					

## 14.2 Diseases

### 14.2.1 Bacterial Spot

#### • Biology & Cultural

[1.1] Bacterial spot is a devastating disease of peaches and nectarines as well as plums, prunes and apricots. This disease is most likely to be a problem on susceptible varieties (e.g., AutumnGlo, Babygold 5, Redhaven, California white-fleshed varieties, nectarines). Any variety developed in drier climates and then grown in the more humid climate of New England has a strong likelihood of being susceptible. Also, this disease will be more severe in the warmer southern portions of New England, in wet years, in orchards with lighter (sandy) soils, and in windy orchard sites. The bacterial spot pathogen, *Xanthomonas arboricola* pv. *pruni* infects leaf scars at leaf drop and overwinters in infected twigs. Bacteria populations subsequently multiply during warm weather and ooze out during spring rains. Immature tissues are less susceptible to the bacterial infection, and as such, infections will not begin until petal fall/shuck split. Early season copper applications are quite effective for controlling the bacterial populations, but are also likely to induce phytotoxicity if one is not careful. Moreover, copper phytotoxicity can cause symptoms similar to that of bacterial spot. Do not plant susceptible peach varieties near plums, prunes, or apricots. Prunes, plum, and apricots are also susceptible to bacterial spot, and no materials are registered for use on bacterial spot of prunes, plum, and apricots.

#### • Pesticide Application Notes

[1.2] Where susceptible varieties are planted, a delayed dormant application of (\$)copper may help reduce bacterial spot disease pressure for the season. Along these lines, if applications of copper were made to manage peach

leaf curl, these applications will substitute for those needed for bacterial spot. Apply copper with caution. Peaches are very susceptible to copper injury, especially after bud break. Copper phytotoxicity will be exacerbated by cool wet weather and environmental acidity.

[1.3] Where control is needed, apply sprays of oxytetracycline products such as Mycoshield or FireLine every 7-10 days from shuck split until 3 wk before harvest. The sprays immediately after shuck split are the most important for protecting the fruit. Thorough coverage is essential. Copper sprays applied for peach leaf curl at leaf drop should also aid in bacterial spot control.

[1.4] Low rates of copper can be applied post-bloom to reduce harvest damage and build up of bacterial populations in susceptible varieties. Take caution with post-bloom copper applications. These copper applications may result in phytotoxicity, especially if no rains occur between applications. If copper sprays are applied under acidic conditions (e.g., with LI-700 or other acidifiers) these may be more phytotoxic than copper applied alone. Copper products should be alternated with oxytetracycline products (e.g. Mycoshield, FireLine) for resistance management. See 1.3 above. This approach also reduces phytotoxicity from the copper and lowers the overall cost as compared to using oxytetracycline alone.

Kocide 3000 is the only copper product that can be applied up to six times after bloom. However, the recommended rate for foliar applications is only 0.75 to 1.5 oz/A which is **much lower** than label rates. The low rates are needed to prevent damage to the leaves and fruit, especially on nectarines. Other copper products allow postbloom applications but are limited to first and second covers. If other copper products are used, the rates need to be much lower than those stated on the label. Consult with your state fruit specialist or crop advisor for rate information.