



**FIGURE 13.1.1** 

#### **GROWTH STAGES IN TART CHERRY**

1. Dormant 2. Swollen bud **3 Bud burst** 4a. Early white bud 4b. White bud 5. Bloom 6. Petal fall 7. Fruit set



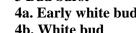




















**FIGURE 13.1.2** 

#### **GROWTH STAGES IN SWEET CHERRY**

Dormant
 Swollen bud
 Bud burst
 Early white bud
 White bud
 Bloom
 Petal fall
 Fruit set









## **13 Cherries**

#### **13.1 Insecticides and Fungicides for Cherries**

See Sections 13.2, 13.3, and 13.4 for comments related to this table.

#### Table 13.1.1. Pesticide Spray Table – Cherries

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

V	IRAC/ FRAC			REI	PHI		Comments
Pest	Code	Product	Rate(s)	(hrs)	(days)	Efficacy	(see text)
Late Dormant		H 1 2000	1 1 0 0 11 /1 00 1	40			F1 13
Bacterial canker (Pseudomonas		Kocide 3000	1.1-2.3 lb/100 gal	48	BL, PH (C)		[1.1]
(Fseudomonas syringae)		or Cuprofix Ultra 40 Disperss	5-8 lb/A	48	BL, PH (C)		[1.2]
Syringue)		or other coppers	see comments, read labels				
Phytophthora		Ridomil Gold 4SL	2 qt/A	48	0		[5.2]
root, crown and collar rots							
European red mite, Scales	_	oil	2 gal/100 gal	12	0	high	[11.1],[16.1]
European fruit	4A	Assail 30SG	5.3-8 oz/A	12	7	moderate	[16.1]
lecanium scale,	16	Centaur 0.7WDG	34.5-46.0 oz/A	12	14	high	_
San Jose scale	7C	Esteem 35WP	4-5 oz/A	12	14	high	_
	1B	*Lorsban Advanced 3.76EC	1.5-4 pt/A	96	PB	high	_
	1B	Lorsban 75WG	1.33-2 lb/A	96	14	high	
White bud							
Brown rot		Bravo Weather Stik 6F	1.0-1.375 pt/100 gal	12	SS		
(blossom blight)			or 3.1-4.1 pt/A				
		or other chlorothalonil fo	· /				-
		Captan 50WP	4 lb/A	24	0		[3.1],[3.2]
		or Captan 80 WDG	2.5 lb/A	24	0		
		or Captec 4L	0.75-1 qt/100 gal or 2 qt/A	24	0		_
		Echo 720	1.09-1.4 pt/100 gal	12	SS		
		or Echo 90DF	2.25-3.5 lbs/A				_
		Elevate 50WDG	0.33-0.5 lb/100 gal or 1.5 lb/A	12	0		_
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Indar 2F	6fl oz/A	12	0		_
		Merivon	4-6.7 fl oz.acre	12	0		_
		Meteor 4F	1-2 pt/acre	24	PF		_
		Tilt	1.0-1.6 fl oz/100 gal or 4 fl oz/A	12	0		_
		Pristine 38WDG	10.5-14.5 oz/A	12	0		_
		Cabrio EG	9.55 oz/A	12	0		_
		Quash	2.5-3.5 oz/A	12	14		_
		Rally 40 WSP	1.25-2 oz 100 gal or 2.5-6 oz/A	24	0		_
		Rovral 4F	8fl oz/100 gal or 1 pt/A	24	PF		_
		Sulfur 92WP	5-10 lb/100 gallons	24	0		_
		Microthiol Disperss	10-20 bl/100 gallons	24	0		

 $2014 \, \text{New England Tree Fruit Management Guide}$ 

#### IRAC/ FRAC REI PHI Comments Code Pest Product Rate(s) (hrs) (days) Efficacy (see text) White bud (continued) \*Asana XL 0.66EC 2-5.8 fl oz/100 gal 12 14 **Black cherry** 3A high [9.1] or 4.8-14.5 fl oz/A aphid 2.5-5.3 oz/A 12 7 4A Assail 30SG high Aza-Direct 1.2L \_ 11.5-42 fl oz/A 4 0 moderate Azatin XL Plus 3L 10-16 fl oz/A 4 0 moderate \*Baythroid XL 1EC 2.4-2.8 fl oz/A 12 7 3A high 9C Beleaf 50SG 2-2.8 oz/A 12 14 high 1BMalathion 57EC 12 3 1.5 pt/A moderate M-Pede 49L 2 gal/100 gal 12 0 moderate 23 6-9 fl oz/acre 24 7 Movento high 3A \*Warrior II 2.08 CS 1.28-2.56 fl oz/A 24 14 high 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. 3A/28 \*Voliam Xpress 6-12 fl oz/A 24 14 high [9.1] Bloom Bravo Ultrex 82.5 0.9-1.25 lb/100 gal Black knot 12 SS [2.1],[2.2] WDG or 2.8-3.8 lb/A or Bravo Weather Stik 1.0-1.375 pt/100 gal 6F **Brown rot** See materials listed under White Bud [3.1],[3.3], (blossom blight) [3.4] Petal fall **Black knot** See recommendations under Bloom [2.1],[2.2] **Brown rot** See recommendations under White Bud [3.3],[3.5] Bravo Ultrex 82.5 0.9-1.25 lb/100 gal 12 Leaf spot SS. PH [4.1] WDG or 2.8-3.8 lb/A or Bravo Weather Stik 1.0-1.375 pt/100 gal 6F or other chlorothalonil formulations (see labels) Captan 50WP 1-2 lb/100 gal or 4 24 0 lb/A or Captan 80 WDG 2.5 lb/A 24 0 0.75-1 qt/100 gal or 0 or Captec 4L 24 2 qt/AEcho 720 1.0-1.4 pt/100 gal 12 SS or Echo 90DF 2.25-3.5 lbs/A 14-20 fl oz /A Fontelis SC 12 0 [3.8] 12 Indar 2F 6- fl oz/A 0 Tilt 12 1.0-1.6 fl oz/100 gal 0 or 4 fl oz/A Rally 40 WSP 1.25-2 oz/100 gal or 24 0 2.5-6 oz/A Gem 500SC 1.9-3.8 oz/A 12 1 Pristine 38WDG 10.5-14.5 oz/A 12 0 Ouash 12 14 4 oz/A Sulfur 92WP 5-10 lb/100 gallons 24 0

#### Table 13.1.1. Pesticide Spray Table – Cherries

effect multi mode 3A/ 3A/	Microthiol Disperss *Ambush 25WP *Asana XL 0.66EC *Baythroid XL 1EC *Lorsban Advanced 3.76EC or Lorsban 75WG *Pounce 25WP *Warrior II 2.08 CS Pheromone disruption ties: Isomate-PTB Dual blowing pre-mix products ar iveness and insecticide resist ble pest species present are ap s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	ance management, their ppropriately matched to t	use shou	ld be reserv	ved for situat	ions when
Leaf spot (continued) American plum borer, Lesser peachtree borer The f effect multi mode 3A/ Black cherry aphid Plum curculio 4A 3A/ 22/	*Ambush 25WP *Asana XL 0.66EC *Baythroid XL 1EC *Lorsban Advanced 3.76EC or Lorsban 75WG *Pounce 25WP *Warrior II 2.08 CS Pheromone disruption ties: Isomate-PTB Dual bllowing pre-mix products ar iveness and insecticide resist ble pest species present are a s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	6.4-12.8 oz/A         2-5.8 fl oz/100 gal         or 4.8-14.5 fl oz/A         1.4-2.8 fl oz/A [see         Comment 8.1]         1.5-3 qt/100 gal         1.3-2 lb/A         6.4-12.8 oz/A         1.28-2.56 fl oz/A         150 ties/A         re also labeled for use agarance management, their         ppropriately matched to to to roduct.         1.5-4.75 fl oz/100         gal or 6-19 fl oz/A	12 12 12 96 96 12 24 ainst thes use shou he comb	$     \frac{3}{14} $ 7 21 21 21 3 14  se pests; ho ld be reservingtion of a 21	high high high moderate high high wever, for be ved for situat active ingred high	[13.2] [13.1] [13.1] [13.1] [13.1] [13.2] [13.2] [13.2] [13.2] [13.2]
American plum porer,3A 3AJesser peachtree porer3A1E1E3A1E1E3A1E3A3A3A3A3A3A3A3A3A3Back cherry ophid[see G3A	<ul> <li>*Asana XL 0.66EC</li> <li>*Baythroid XL 1EC</li> <li>*Lorsban Advanced</li> <li>3.76EC</li> <li>or Lorsban 75WG</li> <li>*Pounce 25WP</li> <li>*Warrior II 2.08 CS</li> <li>Pheromone disruption ties: Isomate-PTB Dual</li> <li>ollowing pre-mix products ar iveness and insecticide resist</li> <li>ple pest species present are aps of action contained in the p</li> <li>*Gladiator EC</li> <li>*Voliam Xpress</li> <li>Comment 9.2]</li> </ul>	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A 1.4-2.8 fl oz/A [see Comment 8.1] 1.5-3 qt/100 gal <u>1.3-2 lb/A</u> 6.4-12.8 oz/A <u>1.28-2.56 fl oz/A</u> 150 ties/A re also labeled for use aga cance management, their ppropriately matched to t roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12 12 96 96 12 24 ainst thes use shou the comb	$   \begin{array}{r}     14 \\     7 \\     21 \\     21 \\     3 \\     14 \\     5e pests; ho ld be reserving in ation of a label{eq:second}   \end{array} $	high high high moderate high high wever, for be ved for situat active ingred high	[13.2] [13.1] [13.1] [13.1] [13.1] [13.2] [13.2] [13.2] [13.2] [13.2]
borer, Lesser peachtree borer 3A 1E 3A 1E 3A 1E 3A 3A 3A 3A 3A 3A 3A 3A 3A 3A	<ul> <li>*Asana XL 0.66EC</li> <li>*Baythroid XL 1EC</li> <li>*Lorsban Advanced</li> <li>3.76EC</li> <li>or Lorsban 75WG</li> <li>*Pounce 25WP</li> <li>*Warrior II 2.08 CS</li> <li>Pheromone disruption ties: Isomate-PTB Dual</li> <li>ollowing pre-mix products ar iveness and insecticide resist</li> <li>ple pest species present are aps of action contained in the p</li> <li>*Gladiator EC</li> <li>*Voliam Xpress</li> <li>Comment 9.2]</li> </ul>	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A 1.4-2.8 fl oz/A [see Comment 8.1] 1.5-3 qt/100 gal <u>1.3-2 lb/A</u> 6.4-12.8 oz/A <u>1.28-2.56 fl oz/A</u> 150 ties/A re also labeled for use aga cance management, their ppropriately matched to t roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12 12 96 96 12 24 ainst thes use shou the comb	$   \begin{array}{r}     14 \\     7 \\     21 \\     21 \\     3 \\     14 \\     5e pests; ho ld be reserving in ation of a label{eq:second}   \end{array} $	high high high moderate high high wever, for be ved for situat active ingred high	[13.2] [13.1] [13.1] [13.1] [13.1] [13.2] [13.2] [13.2] [13.2] [13.2]
borer 3A 1E 3A 1E 3A 3A 3A 3A 3A 3A/ 3A/ 3A/ 3A/	*Lorsban Advanced 3.76EC or Lorsban 75WG *Pounce 25WP *Warrior II 2.08 CS Pheromone disruption ties: Isomate-PTB Dual blowing pre-mix products ar iveness and insecticide resist ble pest species present are a s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	1.4-2.8 fl oz/A [see Comment 8.1] 1.5-3 qt/100 gal 1.3-2 lb/A 6.4-12.8 oz/A 1.28-2.56 fl oz/A 150 ties/A re also labeled for use aga ance management, their ppropriately matched to the roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	96 96 12 24 ainst thes use shou he comb	21 $21$ $3$ $14$ See pests; ho ld be reserving in ation of a 21	high <u>high</u> <u>moderate</u> <u>high</u> <u>high</u> wever, for be ved for situat active ingred high	est ions when ients and [8.1]
1E         3A         3A         3A         3A         The f         effect         multi         mode         3A/         3A/ <t< td=""><td>3.76EC or Lorsban 75WG *Pounce 25WP *Warrior II 2.08 CS Pheromone disruption ties: Isomate-PTB Dual ollowing pre-mix products ar iveness and insecticide resist ole pest species present are ap s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]</td><td>1.5-3 qt/100 gal 1.3-2 lb/A 6.4-12.8 oz/A 1.28-2.56 fl oz/A 150 ties/A re also labeled for use aga ance management, their ppropriately matched to the roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A</td><td>96 12 24 ainst thes use shou the comb</td><td><math display="block">     \frac{21}{3} </math> 3 14 3 5 6 pests; ho 1d be reserving in the formula of a 21</td><td>high moderate high high wever, for be ved for situat active ingred high</td><td>est ions when ients and [8.1]</td></t<>	3.76EC or Lorsban 75WG *Pounce 25WP *Warrior II 2.08 CS Pheromone disruption ties: Isomate-PTB Dual ollowing pre-mix products ar iveness and insecticide resist ole pest species present are ap s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	1.5-3 qt/100 gal 1.3-2 lb/A 6.4-12.8 oz/A 1.28-2.56 fl oz/A 150 ties/A re also labeled for use aga ance management, their ppropriately matched to the roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	96 12 24 ainst thes use shou the comb	$     \frac{21}{3} $ 3 14 3 5 6 pests; ho 1d be reserving in the formula of a 21	high moderate high high wever, for be ved for situat active ingred high	est ions when ients and [8.1]
3A       3A       3A       3A       3A       The f       effect       multi       mode       3A/	*Pounce 25WP     *Warrior II 2.08 CS     Pheromone disruption     ties:     Isomate-PTB Dual     blowing pre-mix products ar     iveness and insecticide resist     ble pest species present are a     s of action contained in the p     6 *Gladiator EC     28 *Voliam Xpress     Comment 9.2]	6.4-12.8 oz/A 1.28-2.56 fl oz/A 150 ties/A re also labeled for use aga cance management, their ppropriately matched to the roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12 24 ainst thes use shou the comb 12	$\frac{3}{14}$ se pests; ho ld be reservination of a 21	moderate high high owever, for be ved for situat active ingred high	est ions when ients and [8.1]
The f effect multi mode 3A/ 3A/ 3A/ Black cherry [see C phid Plum curculio 4A 3A 22/	*Warrior II 2.08 CS         Pheromone disruption         ties:         Isomate-PTB Dual         ollowing pre-mix products ar         iveness and insecticide resist         ole pest species present are a         s of action contained in the p         6       *Gladiator EC         28       *Voliam Xpress         Comment 9.2]	1.28-2.56 fl oz/A 150 ties/A re also labeled for use aga ance management, their ppropriately matched to to roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	24 ainst thes use shou he comb	14 se pests; ho ld be reserv- ination of a 21	high high wever, for be ved for situat active ingred high	est ions when ients and [8.1]
The f effect multi mode 3A/ 3A/ 3A/ 3A/ Plum curculio 4A 3A 3A 22/	Pheromone disruption ties: Isomate-PTB Dual ollowing pre-mix products ar iveness and insecticide resist ole pest species present are ap s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	150 ties/A re also labeled for use aga cance management, their ppropriately matched to t roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	ainst thes use shou he comb 12	se pests; ho ld be reserv ination of a 21	high wever, for be ved for situat active ingred high	est ions when ients and [8.1]
effect multi mode 3A/ 3A/ Black cherry [see C Plum curculio 4A 3A 3A 22/	ties: Isomate-PTB Dual ollowing pre-mix products ar iveness and insecticide resist ole pest species present are a s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	re also labeled for use aga ance management, their ppropriately matched to t roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	use shou he comb	ld be reservination of a	wever, for be ved for situat active ingred high	est ions when ients and [8.1]
effect multi mode 3A/ 3A/ Black cherry phid Plum curculio 4A 3A 22/	billowing pre-mix products ar iveness and insecticide resist ole pest species present are a s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	re also labeled for use aga ance management, their ppropriately matched to t roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	use shou he comb	ld be reservination of a	wever, for be ved for situat active ingred high	est ions when ients and [8.1]
effect multi mode 3A/ 3A/ Black cherry phid Plum curculio 4A 3A 22/	iveness and insecticide resist ble pest species present are a s of action contained in the p 6 *Gladiator EC 28 *Voliam Xpress Comment 9.2]	ance management, their ppropriately matched to t roduct. 1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	use shou he comb	ld be reservination of a	ved for situat active ingred high	ions when ients and [8.1]
Black cherry [see Comphid 2014] Plum curculio 4A 3A 222	Comment 9.2]		24	14	high	
Black cherry [see Comphid 2014] Plum curculio 4A 3A 22/	Comment 9.2]	6-12 tl oz/A	24	14	high	
Plum curculio 4A 3A 3A 22						
3A 	Actara 25WDG	4.5-5.5 oz/A	12	14	high	[15.1]
22/		6.4-12.8 oz/A	12	3	high	
		2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	high	
3A	A Avaunt 30WDG	5-6 oz/A	12	14	high	-
	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	high	-
1E	Imidan-70W (tart cherry only!)	0.75 lb/100 gal or 2.13 lb/A	72	7(C)	high	[15.3]
1E		2 lb/A	96	14	high	[15.3]
3A	*Pounce 25WP	6.4-12.8 oz/A	12	3	high	
1A	Sevin XLR Plus, 4F	2-3 qt/A	12	3	moderate	
1A	or Sevin 80S	2.5-3.75 lb/A			moderate	
-	Surround 95WP	50 lb/A	4	0	moderate	[15.2]
3A	*Warrior II 2.08 CS	1.28-2.56 fl oz/A	24	14	high	
The f and in specie	*Warrior II 2.08 CS ollowing pre-mix products an associate resistance manager as are present and appropriate a contained in the product.	1.28-2.56 fl oz/A re also labeled for use aga nent, their use should be	24 ainst this reserved	14 pest; howe for situation	high ever, for best ons when mu	effectiven ltiple pest
3A/4	A *Leverage 360	2.4-2.8 fl oz/A	12	7	high	[15.1]
<u> </u>		6-7 oz/A	12	14	high	[13.1]
3A/2	28 Voliam Flexi WDG				111211	

Dest	IRAC/ FRAC	Due due 4		REI	PHI	<b>F 66</b>	Comments
Pest	Code	Product	Rate(s)	(hrs)	(days)	Efficacy	(see text)
Shuck split Brown rot, Leaf spot		Bravo Weather Stik 6F	1.0-1.375 pt/100 gal or 3.1-4.1 pt/A	12	SS		[3.1],[3.2]
		or other chlorothalonil fo	· · · · · · · · · · · · · · · · · · ·				
		Captan 50WP	1-2 lb/100 gal or 4 lb/A	24	0		
		or Captan 80 WDG	2.5 lb/A	24	0		
		or Captec 4L	0.75-1 qt/100 gal or 2 qt/A	24	0		
		Echo 720	1.0-1.4 pt/100 gal	12	SS		
		or Echo 90DF	2.25-3.5 lbs/A				_
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Merivon	4-6.7 fl oz/acre	12	0		
		Rally 40 WSP (brown rot only)	2.5-6 oz/acre	24	0		_
		Gem 500SC	1.9-3.8 oz/A	12	1		
		Pristine 38WDG	10.5-14.5 oz/A	12	0		
		Cabrio EG	9.55 oz/A	12	0		
		Indar 2F	6fl oz/A	12	0		
		Quash	2.5-4. oz/A	12	14		
		Sulfur 92WP	5-10 lb/100 gallons	24	0		
		Microthiol Disperss	10-20 bl/100 gallons	24	0		
Black knot		Bravo Ultrex 82.5 WDG	0.9-1.25 lb/100 gal or 2.8-3.8 lb/A	12	SS		[2.1],[2.2]
		or Bravo Weather Stik 6F	1.0-1.375 pt/100 gal or 3.1-4.1 pt/A				
		or other chlorothalonil fo	· · · · · · · · · · · · · · · · · · ·				
Black cherry	4A	Admire Pro 4.6SC	1.4-2.8 fl oz/A	12	7	high	[9.1]
aphid	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	high	
	4A	Assail 30SG	2.5-5.3 oz/A	12	7	high	
	_	Aza-Direct 1.2L	11.5-42 fl oz/A	4	0	moderate	
		Azatin XL Plus 3L	10-21 fl oz/A	4	0	moderate	
	3A	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	high	
	9C	Beleaf 50SG	2-2.8 oz/A	12	14	high	
	1B	Lorsban 75WG	2 lb/A	96	14	moderate	[9.3]
	1B	Malathion 57EC	1.5 pt/A	12	3	moderate	
		M-Pede 49L	2 gal/100 gal	12	0	moderate	
	23	Movento 240SC	6-9 fl oz/A	24	7	high	
	1A	Sevin XLR Plus, 4F	2-3 qt/A	12	3	high	
		or Sevin 80S	2.5-3.75 lb/A			high	

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

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.

	1					
3A/4A	*Endigo ZC	5-5.5 fl oz/A	24	14	high	[9.1]
3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	high	
4A/28	Voliam Flexi WDG	4-7 oz/A	12	14	high	
3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	high	[15.1]

	IRAC/ FRAC			REI	PHI		Comment
Pest	Code	Product	Rate(s)	(hrs)	(days)	Efficacy	(see text)
Shuck split (conti				()	(		
lum curculio		rials under Petal Fall					
dditional summe							
Brown rot		Captan 50WP	1-2 lb/100 gal or 4 lb/A	24	0		[3.7]
		or Captan 80 WDG	2.5 lb/A	24	0		
		or Captec 4L	0.75-1 qt/100 gal or 2 qt/A	24	0		_
		Elevate 50WDG	1.0 lb/A	12	0		
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Indar 2F	6 oz/A	12	0		_
		Merivon	4-67 fl oz/acre	12	0		-
		Tilt	1.0-1.6 fl oz/100 gal or 4 fl oz/A	12	0		
		Cabrio EG	9.55 oz/A	12	0		
		Gem 500 SC	2.9-3.8 oz/A	12	1		
		Pristine 38WDG	10.5-14.5 oz/A	12	0		-
		Quash	2.5-4 oz/A	12	14		-
		Rally 40 WSP	1.25-2 oz/100 gal or 2.5-6 oz/A	24	0		
eaf spot	Choose f	rom materials listed at Pe					[4.3]
owdery mildew		Quintec	7fl oz/A	12	7		[6.1]
		Rally 40WSP	1.25-2 oz/100 gal or 2.5-6 oz/A	24	0		
		Tilt	1.0-1.6 fl oz/100 gal or 4 fl oz/A	12	0		-
		Procure 480SC	8-16 oz/A	12	1		
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Gem 500SC	1.9-3.8 oz/A	12	1		<u>.</u>
		Cabrio EG	9.55 oz/A	12	0		-
		Pristine 38WDG	10.5-14.5 oz/A	12	0		<u>.</u>
		Quash	2.5-4 oz/A	12	14		-
		Sulfur 92WP	5-10 lb/100 gal	24	0		
	- ·	Microthiol Disperss	10-20 lb/100 gal	24	0		50.43
american plum orer	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	moderate	[8.1]
	3A	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	moderate	<u>.</u>
	1B	Lorsban 75WG	2-3 lb/A	96	21	high	
	and insects a	cticide resistance manage	re also labeled for use aga ment, their use should be ely matched to the combir	reserved	for situation	ons when mu	ltiple pest
	3A/4A	*Endigo ZC	5-5.5 fl oz/A	24	14	high	[8.1]
	3A/6	*Gladiator EC	1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12	21	moderate	[014]
	3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	moderate	
	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	moderate	

`	IRAC/	× · · ·		DEI	DIH		<b>G</b> (
Pest	FRAC Code	Product	Rate(s)	REI (hrs)	PHI (days)	Efficacy	Comments (see text)
Additional summ			Kate(5)	(1115)	(uays)	Efficacy	(see text)
Black cherry	4A	Actara 25WDG	4.5-5.5 oz/A	12	14	moderate	[10.1]
fruit fly,	4A	Admire Pro 4.6SC	1.4-2.8 fl oz/A	12	7	moderate	[10.1]
Cherry fruit fly	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal	12	14	high	
ι ι	571	Asult AL 0.00LC	or 4.8-14.5 fl oz/A	12	14	mgn	
	4A	Assail 30SG	5.3-8 oz/A	12	7	high	
	3A	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	high	
	5	Delegate 25WG	4.5-7 oz/A	4	7	high	
	1B	*Diazinon 50WP	1 lb/100 gal	96	21	high	
	5	Entrust 80WP	0.42-0.83 oz/100 gal or 1.25-2.5 oz/A	4	7	moderate	
	5	or Entrust 2SC	1.3-2.7 fl oz/100 gal or 4-8 fl oz/A			moderate	
	1B	Imidan 70-W	0.75 lb/100 gal or	72	7(C)	high	[10.3]
		(tart cherry only)	2.13 lb/Å			<u> </u>	
	1B	Lorsban 75WG	2 lb/A	96	14	high	[10.3]
	1A	Sevin XLR Plus, 4F	2-3 qt/A	12	3	high	
	1A	or Sevin 80S	2.5-3.75 lb/A			high	
		Surround 95WP	50 lb/A	4	0	moderate	[10.2]
	3A	*Warrior II 2.08 CS	1.28-2.56 fl oz/A	24	14	high	
	effective multiple	wing pre-mix products are ness and insecticide resista pest species are present an faction contained in the pr	ance management, their ind appropriately matched	use shou	ld be reserv	ed for situati	ons when
	3A/4A	*Endigo ZC	5-5.5 fl oz/A	24	14	moderate	[10.1]
	3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	high	[10.1]
	4A/28	Voliam Flexi WDG	6-7 oz/A	12	14	moderate	
	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	high	
European red mite, Twospotted	10A	Apollo 4SC	2-8 oz/A	12	21	high/poor (ERM/ TSSM)	[11.4]
spider mite	3A	*Danitol 2.4EC	10.7-21.3 fl oz/A	24	3	moderate	
	21	Nexter 75WS	4.4-10.67 oz/A	12	300(PH)	high/mod	[11.3]
	10A	Onager 1EC	12-24 fl oz/A	12	7	high/poor	
	21	Portal 0.4EC	2 pt/A	12	7	high	
	10A	Savey 50DF	3-6 oz/A	12	28	high/poor	[11.4]
	12B	*Vendex 50WP	1-5-3 lb/A	48	14	moderate	[11.2]
	10B	Zeal 72WS	2-3 oz/A	12	7	high	[11.4]
	and insects a species a action co	wing pre-mix product is a eticide resistance managen re present and appropriate ntained in the product.	nent, its use should be re ly matched to the combi	served for nation of	or situations	when multi redients and	ple pest
	3A/6	*Gladiator EC	4.75 fl oz/100 gal 19 fl oz/A	12	21	moderate	
Japanese beetle	4A	Admire Pro 4.6SC	1.4-2.8 fl oz/A	12	7	moderate	[12.2]
	4A	Assail 30SG	5.3-8 oz/A	12	7	high	
	1B	Imidan 70-W (tart cherry only)	0.75 lb/100 gal or 2.13 lb/A	72	7(C)	moderate	
		(	2.10 10/11				

	IRAC/ FRAC			REI	PHI		Comments
Pest	Code	Product	Rate(s)	(hrs)	(days)	Efficacy	(see text)
Additional summe				()	(		(200 0000)
Japanese beetle	1A	Sevin XLR Plus, 4F	2-3 qt/A	12	3	high	
(continued)		or Sevin 80S	2.5-3.75 lb/A		-	8	
	The follo	wing pre-mix products are		ainst this	pest; howe	ever, for best	effectiveness
	and insec	cticide resistance managem	nent, their use should be	reserved	for situation	ons when mu	ltiple pest
		re present and appropriate	ly matched to the combi	nation of	active ing	redients and	modes of
	-	intained in the product.					54.0.07
	3A/4A	*Endigo ZC	5-5.5 fl oz/A	24	14	high	[12.2]
	3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	high	
~	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	high	54 4 87
San Jose scale	4A	Admire Pro 4.6SC	2.8 fl oz/A	12	7	moderate	[16.2]
	4A	Assail 30SG	8 oz/A	12	7	moderate	
	16	Centaur 0.7WDG	34.5-46 oz/A	12	14	high	
	<u>7C</u>	Esteem 35WP	4-5 oz/A	12	14	high	
	23	Movento 240SC	6-9 fl oz/A	24	7	high	
		wing pre-mix product is a					
		cticide resistance managen					
		re present and appropriate ontained in the product.	ry matched to the combi	nation of	active mg	requents and	nodes of
	3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	moderate	
Lesser peachtree	<i>J</i> 11/ <del>1</del> 11	Pheromone disruption	150 ties/A	12	/	high	[13.1]
borer		ties:	100 100/11			mgn	[15.1]
		Isomate-PTB Dual					
	3A	*Ambush 25WP	6.4-12.8 oz/A	12	3	moderate	[13.2]
	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal	12	14	high	
			or 4.8-14.5 fl oz/A			C	
	3A	*Baythroid XL 1EC	1.4-2 fl oz /A	12	7	high	
	1B	or Lorsban 75WG	1.3-2 lb/A	96	14	high	
	3A	*Pounce 25WP	6.4-12.8 oz/A	12	3	moderate	
	3A	*Warrior II 2.08 CS	1.28-2.56 fl oz/A	24	14	high	
	The follo	wing pre-mix products are	e also labeled for use aga	ainst this	pest; howe	ever, for best	effectiveness
		cticide resistance managen					
		re present and appropriate	ly matched to the combi	nation of	active ing	redients and	modes of
		ntained in the product.		2.1	1.4	1 . 1	[12.0]
	3A/4A	*Endigo ZC	5-5.5 fl oz/A	24	14	high	[13.2]
	3A/6	*Gladiator EC	1.5-4.75  fl oz/100	12	21	moderate	
	3A/28	*Voliam Xpress	gal or 6-19 fl oz/A 6-12 fl oz/A	24	14	high	
Obliquebanded	28	Altacor 35WDG	3-4.5 oz/A	4	10	high	[14.1]
leafroller	3A	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	moderate	[14.1]
learnoner	28	Belt 4SC	3-4 fl oz/A	12	7	high	
	3A	*Danitol 2.4EC	10.7-21.3 fl oz/A	24	3	moderate	
	<u> </u>	Delegate 25WG	4.5-7 oz/A	4	7	high	
		Deliver 18WG	0.5-2 lb/A	4	0	high	
	5	Entrust 80WP	0.42-0.83 oz/100 gal	4	7	moderate	
	5		or 1.25-2.5 oz/A	+	/	mouerate	
	5	or Entrust 2SC	1.3-2.7 fl oz/100 gal			moderate	
	-						
			or 4-8 fl oz/A				

#### IRAC/ FRAC REI PHI Comments Code Pest Product Rate(s) (hrs) (days) Efficacy (see text) Additional summer sprays (continued) 1B Lorsban 75WG 1.3-2 lb/A Obliquebanded 96 14 moderate [14.2] leafroller The following pre-mix products are also labeled for use against this pest; however, for best effectiveness (continued) 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 3A/4A 5-5.5 fl oz/A 24 14 moderate [14.1] 12 21 3A/6 \*Gladiator EC 1.5-4.75 fl oz/100 moderate gal or 6-19 fl oz/A 3A/4A \*Leverage 360 2.4-2.8 fl oz/A 12 7 moderate 14 3A/28 \*Voliam Xpress 6-12 fl oz/A 24 high Spotted wing 5 Delegate 25WG 4.5-7 oz/A 4 7 moderate [17.2] **Drosophila** 5 Entrust 80WP 0.42-0.83 oz/100 gal 4 7 high [17.2] or 1.25-2.5 oz/A 5 or Entrust 2SC 1.3-2.7 fl oz/100 gal high or 4-8 fl oz/A Imidan 70WS 1B0.75 lb/100 gal or 72 7(C) moderate [17.2] 2.13 lb/A \*Lambda-Cy 1EC 5.12 fl oz/A 14 3A 24 high Actara 25WDG 4.5-5.5 oz/A 14 Stink bugs, 4A 12 [18.2] moderate including Brown 3A \*Asana XL 0.66EC 2-5.8 fl oz/100 gal 12 14 moderate marmorated or 4.8-14.5 fl oz/A stink bug 7 3A \*Baythroid XL 1EC 2-2.4 fl oz/A 12 moderate 24 3 3A \*Danitol 2.4EC 10.7-21.3 fl oz/A moderate [18.2] 3A \*Warrior II 2.08CS 1.28-2.56 fl oz/A 24 14 moderate 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. 3A/4A \*Endigo ZC 5-5.5 fl oz/A 24 14 high 3A/4A \*Leverage 360 2.4-2.8 fl oz/A 12 moderate 7 4A/28 Voliam Flexi WDG 6-7 oz/A 12 14 moderate 3A/28 \*Voliam Xpress 24 14 6-12 fl oz/A moderate Postharvest Bravo Ultrex 82.5 0.9-1.25 lb/100 gal Leaf spot 12 WDG or 2.8-3.8 lb/A or Bravo Weather Stik 0.75-1 lb/100 gal 6F Captan 50WP 1-2 lb/100 gal or 4 24 lb/A 2.5 lb/A or Captan 80 WDG 24 or Captec 4L 0.75-1 qt/100 gal or 24 2 qt/A C-O-C-S 8-15.5 lbs/A 48 [4.4] plus: hydrated lime 3 lb/100 gal formulations (see labels) Echo 720 1.0-1.4 pt/100 gal 12 or Echo 90DF 2.25-3.5 lbs/A

#### Table 13.1.1. Pesticide Spray Table – Cherries

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

Pest	IRAC/ FRAC Code	Product	Rate(s)	REI (hrs)	PHI (days)	Efficacy	Comments (see text)
Postharvest		Troduct		(115)	(uujs)	Lineacy	(see text)
Leaf spots		Rally 40WSP	1.25-2 oz/100 gal or	24	_		
(continued)		itally to their	2.5-6 oz/A	2.			
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Indar 2F	6 fl oz/A	12	_		
		Syllit FL	1.5-3 pint/A	48	_		
		Pristine 38WDG	10.5-14.5 oz/A	12	_		
		Topsin 4.5FL	7.5-10 fl oz/100 gal or 22.5-30 fl oz/A	48	_		
		Topsin M WSB	0.375-0.5 lb/100 gal or 1.125-1.5 lb/A	48	_		
-		Sulfur 92WP	5-10 lb/100 gallons	24	0		
		Microthiol Disperss	10-20 bl/100 gallons	24	0		- 
Powdery mildew		Rally 40WSP	1.25-2 oz/100 gal or 2.5-6 oz/A	24	-		[4.4]
		Procure 480SC	10-16 oz/A	12	-		
		Gem 500SC	1.9-3.8 oz/A	12	-		
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Cabrio EG	9.55 oz/A	12	0		
		Pristine 38WDG	10.5-14.5 oz/A	12	_		
		Quintec	7fl oz/A	12	7		
		Sulfur 92WP	5-10 lb/100 gallons	24	0		
		Microthiol Disperss	10-20 bl/100 gallons	24	0		
European red	21	Nexter 75WS	4.4-10.67 oz/A	12	300(PH)	high/mod	[11.3]
mite, Twospotted spider mite	3A	*Danitol 2.4EC	10.7-21.3 fl oz/A	24	3	moderate	
Control of Storage	Disorde						
Storage rots		Scholar SC	16 fl oz/100 gal (see comments & label)				[19.1]
Autumn							
Bacterial canker (Pseudomonas		Kocide 3000	1.1-2.3 lb/100 gal (max 12 lb/A)	48	BL, PH (C)		[1.1]
syringae)		or Cuprofix Ultra 40 Disperss	5-8 lb/A	48	BL, PH (C)		[1.2]
		or other coppers	(see comments)				

#### **13.2 Cherry Disease Notes**

# 13.2.1 Bacterial Canker (*Pseudomonas syringae*)

#### Biology & Cultural

**[1.1]** The pathogen causing bacterial canker is favored by cool, wet weather (spring and fall). It can invade leaf scars in fall and fresh pruning wounds in spring if pruning is done under cool, wet conditions. When pruning, make sure to leave a 6-inch stub, especially when removing scaffold branches as the bacteria appear to be arrested within the stub. Avoid flush cut pruning.

#### • Pesticide Application Notes

**[1.2]** We recommend copper applications at 20% and 80% leaf drop in the fall, and one application in the spring late dormant. Position the two applications around any fall pruning. If you are treating sweet cherries, just make one application at 50% leaf drop. Try to time these applications to a warm, dry period. An additional application is also labeled for use after harvest in orchards where disease is severe, although this application should be avoided on sweet cherries in New England due to the potential for leaf injury. Several other commercial copper formulations in addition to those listed may be labeled for this use on cherries. Although they have not been tested,