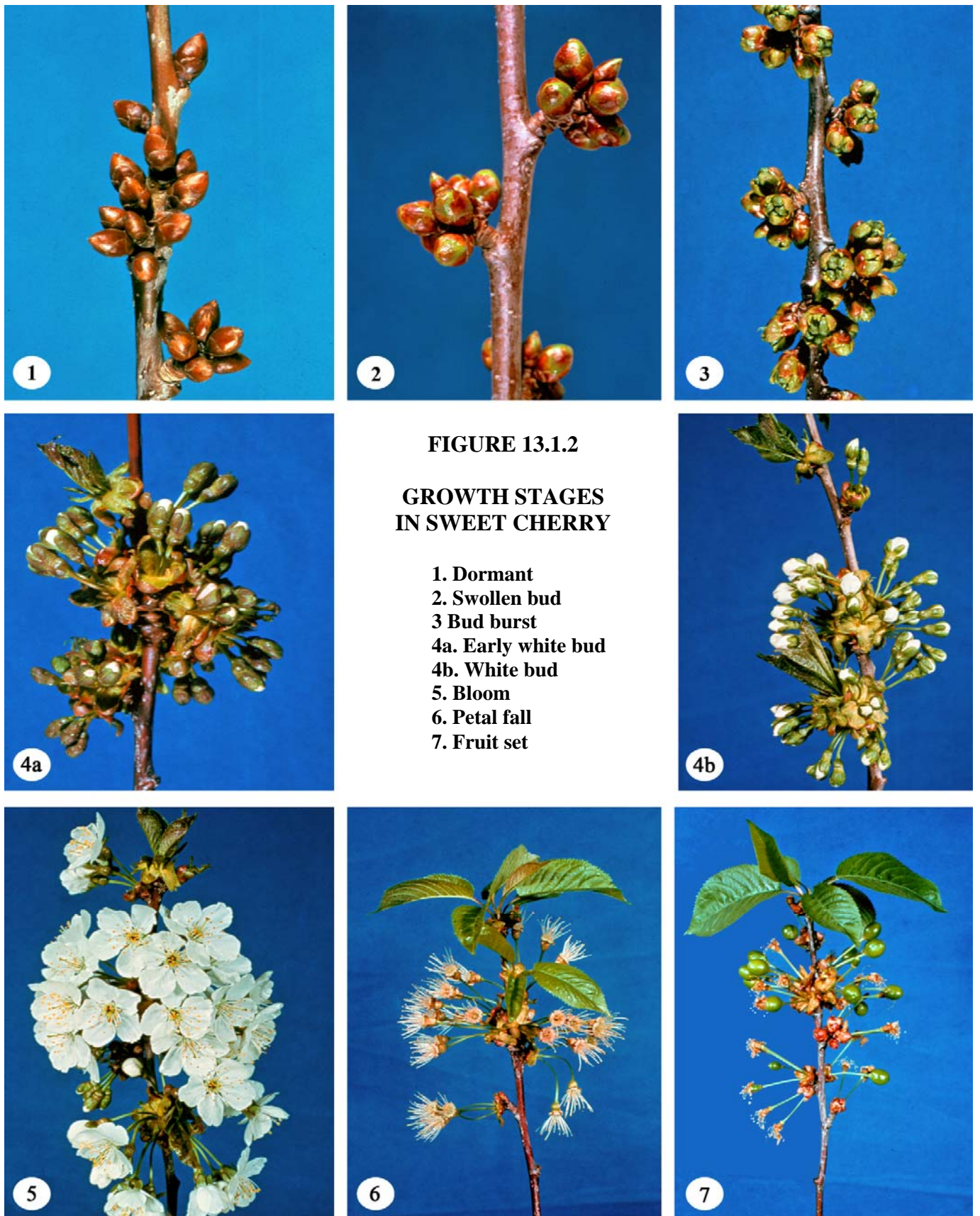


FIGURE 13.1.1
GROWTH STAGES
IN TART CHERRY

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



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.

Pest	IRAC/ FRAC Code	Product	Rate(s)	REI (hrs)	PHI (days)	Efficacy	Comments (see text)
Late Dormant							
Bacterial canker (<i>Pseudomonas syringae</i>)		Kocide 3000	1.1-2.3 lb/100 gal	48	BL, PH (C)		[1.1]
		or Cuprofix Ultra 40	5-8 lb/A	48	BL, PH (C)		[1.2]
		Disperss					
		or other coppers	see comments, read labels				
Phytophthora root, crown and collar rots		Ridomil Gold 4SL	2 qt/A	48	0		[5.2]
European red mite, Scales	–	oil	2 gal/100 gal	12	0	high	[11.1],[16.1]
European fruit lecanium scale, San Jose scale	4A	Assail 30SG	5.3-8 oz/A	12	7	moderate	[16.1]
	16	Centaur 0.7WDG	34.5-46.0 oz/A	12	14	high	
	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 (blossom blight)		Bravo Weather Stik 6F	1.0-1.375 pt/100 gal or 3.1-4.1 pt/A	12	SS		
		or other chlorothalonil formulations (see labels)					
		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			

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)
White bud (continued)							
Black cherry aphid	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	high	[9.1]
	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	10-16 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	Malathion 57EC	1.5 pt/A	12	3	moderate	
	–	M-Pede 49L	2 gal/100 gal	12	0	moderate	
	23	Movento	6-9 fl oz/acre	24	7	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							
Black knot		Bravo Ultrex 82.5 WDG or Bravo Weather Stik 6F	0.9-1.25 lb/100 gal or 2.8-3.8 lb/A 1.0-1.375 pt/100 gal	12	SS		[2.1],[2.2]
Brown rot (blossom blight)	See materials listed under White Bud						[3.1],[3.3], [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]
Leaf spot		Bravo Ultrex 82.5 WDG or Bravo Weather Stik 6F or other chlorothalonil formulations (see labels)	0.9-1.25 lb/100 gal or 2.8-3.8 lb/A 1.0-1.375 pt/100 gal	12	SS, PH		[4.1]
		Captan 50WP	1-2 lb/100 gal or 4 lb/A	24	0		
		or Captan 80 WDG or Captec 4L	2.5 lb/A 0.75-1 qt/100 gal or 2 qt/A	24 24	0 0		
		Echo 720 or Echo 90DF	1.0-1.4 pt/100 gal 2.25-3.5 lbs/A	12	SS		
		Fontelis SC	14-20 fl oz /A	12	0		[3.8]
		Indar 2F	6- fl oz/A	12	0		
		Tilt	1.0-1.6 fl oz/100 gal or 4 fl oz/A	12	0		
		Rally 40 WSP	1.25-2 oz/100 gal or 2.5-6 oz/A	24	0		
		Gem 500SC	1.9-3.8 oz/A	12	1		
		Pristine 38WDG	10.5-14.5 oz/A	12	0		
		Quash	4 oz/A	12	14		
		Sulfur 92WP	5-10 lb/100 gallons	24	0		

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)	
Petal fall (continued)								
Leaf spot (continued)		Microthiol Disperss	10-20 bl/100 gallons	24	0			
American plum borer, Lesser peachtree borer	3A	*Ambush 25WP	6.4-12.8 oz/A	12	3	moderate	[8.1],	
	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	high	[13.2]	
	3A	*Baythroid XL 1EC	1.4-2.8 fl oz/A [see Comment 8.1]	12	7	high		
	1B	*Lorsban Advanced 3.76EC	1.5-3 qt/100 gal	96	21	high		
	1B	or Lorsban 75WG	1.3-2 lb/A	96	21	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		
		Pheromone disruption ties:						
	–	Isomate-PTB Dual	150 ties/A			high	[13.1]	
	The following pre-mix products are also labeled for use against these pests; 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.							
	3A/6	*Gladiator EC	1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12	21	high		
	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	high	[8.1]	
Black cherry aphid	[see Comment 9.2]						[9.2]	
Plum curculio	4A	Actara 25WDG	4.5-5.5 oz/A	12	14	high	[15.1]	
	3A	*Ambush 25WP	6.4-12.8 oz/A	12	3	high		
	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	high		
	22A	Avaunt 30WDG	5-6 oz/A	12	14	high		
	3A	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	high		
	1B	Imidan-70W (tart cherry only!)	0.75 lb/100 gal or 2.13 lb/A	72	7(C)	high	[15.3]	
	1B	Lorsban 75WG	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 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/6	*Gladiator EC	1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12	21	high	
		3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	high	[15.1]
		4A/28	Voliam Flexi WDG	6-7 oz/A	12	14	high	
	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	high		

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)	
Shuck split								
Brown rot, Leaf spot		Bravo Weather Stik 6F or other chlorothalonil formulations (see labels)	1.0-1.375 pt/100 gal or 3.1-4.1 pt/A	12	SS		[3.1],[3.2]	
		Captan 50WP or Captan 80 WDG or Captec 4L	1-2 lb/100 gal or 4 lb/A 2.5 lb/A 0.75-1 qt/100 gal or 2 qt/A	24 24 24	0 0 0			
		Echo 720 or Echo 90DF	1.0-1.4 pt/100 gal 2.25-3.5 lbs/A	12	SS			
		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 or Bravo Weather Stik 6F or other chlorothalonil formulations (see labels)	0.9-1.25 lb/100 gal or 2.8-3.8 lb/A 1.0-1.375 pt/100 gal or 3.1-4.1 pt/A	12	SS		[2.1],[2.2]
Black cherry aphid	4A	Admire Pro 4.6SC	1.4-2.8 fl oz/A	12	7	high	[9.1]	
	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 or Sevin 80S	2-3 qt/A 2.5-3.75 lb/A	12	3	high high		
	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	[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]		

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)	
Shuck split (continued)								
Plum curculio	See materials under Petal Fall							
Additional summer sprays								
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			
Leaf spot	Choose from materials listed at Petal Fall.						[4.3]	
Powdery 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			
		Cabrio EG	9.55 oz/A	12	0			
		Pristine 38WDG	10.5-14.5 oz/A	12	0			
		Quash	2.5-4 oz/A	12	14			
		Sulfur 92WP	5-10 lb/100 gal	24	0			
American plum borer	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		
	1B	Lorsban 75WG	2-3 lb/A	96	21	high		
	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	[8.1]	
	3A/6	*Gladiator EC	1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12	21	moderate		
	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		

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)
Additional summer sprays (continued)							
Black cherry fruit fly, Cherry fruit fly	4A	Actara 25WDG	4.5-5.5 oz/A	12	14	moderate	[10.1]
	4A	Admire Pro 4.6SC	1.4-2.8 fl oz/A	12	7	moderate	
	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	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 (tart cherry only)	0.75 lb/100 gal or 2.13 lb/A	72	7(C)	high	[10.3]
	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		
The following pre-mix products are also labeled for use against these pests; 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	moderate	[10.1]
	3A/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	high	
	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 spider mite	10A	Apollo 4SC	2-8 oz/A	12	21	high/poor (ERM/ TSSM)	[11.4]
	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]
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/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	

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)	
Additional summer sprays (continued)								
Japanese beetle (continued)	1A	Sevin XLR Plus, 4F or Sevin 80S	2-3 qt/A 2.5-3.75 lb/A	12	3	high		
	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	[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		
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		
	7C	Esteem 35WP	4-5 oz/A	12	14	high		
	23	Movento 240SC	6-9 fl oz/A	24	7	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/4A	*Leverage 360	2.4-2.8 fl oz/A	12	7	moderate		
Lesser peachtree borer	–	Pheromone disruption ties: Isomate-PTB Dual	150 ties/A			high	[13.1]	
	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 or 4.8-14.5 fl oz/A	12	14	high		
	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 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	[13.2]
		3A/6	*Gladiator EC	1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12	21	moderate	
	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	high		
Obliquebanded leafroller	28	Altacor 35WDG	3-4.5 oz/A	4	10	high	[14.1]	
	3A	*Baythroid XL 1EC	2.4-2.8 fl oz/A	12	7	moderate		
	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		
	5	Delegate 25WG	4.5-7 oz/A	4	7	high		
	11A	Deliver 18WG	0.5-2 lb/A	4	0	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		
	11A	Javelin 7.5 WDG	0.25-4 lb/A	4	0	high		

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)
Additional summer sprays (continued)							
Obliquebanded leafroller (continued)	1B	Lorsban 75WG	1.3-2 lb/A	96	14	moderate	[14.2]
	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	moderate	[14.1]
	3A/6	*Gladiator EC	1.5-4.75 fl oz/100 gal or 6-19 fl oz/A	12	21	moderate	
	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	high	
Spotted wing Drosophila	5	Delegate 25WG	4.5-7 oz/A	4	7	moderate	[17.2]
	5	Entrust 80WP	0.42-0.83 oz/100 gal or 1.25-2.5 oz/A	4	7	high	[17.2]
	5	or Entrust 2SC	1.3-2.7 fl oz/100 gal or 4-8 fl oz/A			high	
	1B	Imidan 70WS	0.75 lb/100 gal or 2.13 lb/A	72	7(C)	moderate	[17.2]
	3A	*Lambda-Cy 1EC	5.12 fl oz/A	24	14	high	
Stink bugs, including Brown marmorated stink bug	4A	Actara 25WDG	4.5-5.5 oz/A	12	14	moderate	[18.2]
	3A	*Asana XL 0.66EC	2-5.8 fl oz/100 gal or 4.8-14.5 fl oz/A	12	14	moderate	
	3A	*Baythroid XL 1EC	2-2.4 fl oz/A	12	7	moderate	
	3A	*Danitol 2.4EC	10.7-21.3 fl oz/A	24	3	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	7	moderate	
	4A/28	Voliam Flexi WDG	6-7 oz/A	12	14	moderate	
	3A/28	*Voliam Xpress	6-12 fl oz/A	24	14	moderate	
Postharvest							
Leaf spot		Bravo Ultrex 82.5 WDG or Bravo Weather Stik 6F	0.9-1.25 lb/100 gal or 2.8-3.8 lb/A 0.75-1 lb/100 gal	12	–		
		Captan 50WP	1-2 lb/100 gal or 4 lb/A	24	–		
		or Captan 80 WDG or Captec 4L	2.5 lb/A 0.75-1 qt/100 gal or 2 qt/A	24 24	– –		
		C-O-C-S <i>plus:</i> hydrated lime formulations (see labels)	8-15.5 lbs/A 3 lb/100 gal	48	–		[4.4]
		Echo 720 or Echo 90DF	1.0-1.4 pt/100 gal 2.25-3.5 lbs/A	12	–		

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							
Leaf spots (continued)		Rally 40WSP	1.25-2 oz/100 gal or 2.5-6 oz/A	24	–		
		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 mite, Twospotted spider mite	21	Nexter 75WS	4.4-10.67 oz/A	12	300(PH)	high/mod	[11.3]
	3A	*Danitol 2.4EC	10.7-21.3 fl oz/A	24	3	moderate	
Control of Storage Disorders							
Storage rots		Scholar SC	16 fl oz/100 gal (see comments & label)				[19.1]
Autumn							
Bacterial canker (<i>Pseudomonas syringae</i>)		Kocide 3000	1.1-2.3 lb/100 gal (max 12 lb/A)	48	BL, PH (C)		[1.1]
		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,