

Oklahoma Cooperative Extension Service

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EXTENSION

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Commercial Peach-Nectarine Insect and Disease Control 2020

Entolmology and Plant Pathology

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In the following table, the quantity of materials to use to apply to peaches and nectarines is given as amount per acre, which is the amount of spray volume needed to cover one acre of well pruned, standard size trees. Determine the amount of water being used per acre on your trees then add the rate of the chemical listed below in the rate/acre column to the amount of water. Always read the label carefully for any restrictions or changes - THE LABEL IS THE LAW. In

Phil Mulder **Brenda Sanders** Horticultural Communications Professor and Department Head

> Oklahoma, applications are commonly made using 20 to 150 gallons per acre. How effective this range in spray volumes will be is determined by several factors including: tree sizes, tree densities, canopy density, and type of nozzles. Air blast sprayers normally require amounts on the higher end of this scale. Irrespective of the amount of liquid per acre applied; use the amount of chemical per acre as a guide for mixing.

Pests Involved	Material	Group	Rate/Acre	Comments
Peach Leaf Curl	Bravo Champ WG ^{OMRI} Kocide 2000 ^{OMRI} Kocide 3000-O ^{OMRI} Bordeaux Mix ^{OMRI}	M05 M01 M01 M01	3.1-4.1 pts 8-16 lb. 6-12 lb 3.5-7 lb.	For peach leaf curl, apply amount of chemical in a minimum of 150 gallons water per acre. Bravo Weather Stik formulation. Others exist.
San Jose Scale	Esteem 0.86EC Lorsban 4Er (Can also be used wirk Movento Pasada 1.6F Superior oilOMRI	7C 1B th oil) 23 4A	13-16 fl. oz. 1.5-4 pt. 6.0-9.0 fl. oz. 4.0-8.0 oz. 2-4 gal	For scale insect control, apply amount of chemical in a minimum of 150 gallons water per acre. Mites and San Jose Scale
Forbes Scale	Dormant oil ^{OMRI} Lime Sulfur1 ^{OMRI} Superior oil ^{OMRI}	M04	4.5-6 gal See label 2-4 gal	Oils can be applied before buds break. If buds are just beginning to open (1 to 5% bud swell), adjust rates downward (e.g., 1.5 gals/A).
Peach Leaf Curl	Bravo Champ WG ^{OMRI} Ferbam 76WDG Kocide 3000-O ^{OMRI}	M05 M01 M03 M01	3.1-4.1 pts 8-16 lb. 4.5 lb. 3.5-7 lb.	Bravo Weather Stik formulation. Others exist. For delayed dormant spray at pink bud, use 3.5-5 lb.
	Peach Leaf Curl San Jose Scale Forbes Scale	Peach Leaf Curl Bravo Champ WG ^{OMRI} Kocide 2000 ^{OMRI} Kocide 3000-O ^{OMRI} Bordeaux Mix ^{OMRI} Bordeaux Mix ^{OMRI} San Jose Scale Esteem 0.86EC Lorsban 4Er (Can also be used wi Movento Pasada 1.6F Superior oil ^{OMRI} Lime Sulfur1 ^{OMRI} Superior oil ^{OMRI} Superior oil ^{OMRI} Peach Leaf Curl Bravo Champ WG ^{OMRI} Ferbam 76WDG	Peach Leaf Curl Bravo M05 Champ WG ^{OMRI} M01 Kocide 2000 ^{OMRI} M01 Kocide 3000-O ^{OMRI} M01 Bordeaux Mix ^{OMRI} M01 Bordeaux Mix ^{OMRI} San Jose Scale Esteem 0.86EC 7C Lorsban 4Er 1B (Can also be used with oil) Movento 23 Pasada 1.6F 4A Superior oil ^{OMRI} Forbes Scale Dormant oil ^{OMRI} Lime Sulfur1 ^{OMRI} Lime Sulfur1 ^{OMRI} Superior oil ^{OMRI} Peach Leaf Curl Bravo M05 Champ WG ^{OMRI} M01 Ferbam 76WDG M03 Kocide 3000-O ^{OMRI} M01	Peach Leaf Curl Bravo

Application and Timing	Pests Involved	Material	Group	Rate/Acre	Comments
PRE-BLOOM OR EARLY BLOOM: Flower buds show pink.	Tarnished plant bug Stink bug	Asana XL ^r BaythroidXL ^r	3A 3A	4.8-14.5 fl. oz. 2.0-2.4 fl. oz.	2.4-2.8 fl. oz. for peach twig borer. Max. 5.6 fl. oz./A/season
Examine trees for	Peach twig borer	Beleaf 50SG Delegate WG	29 5	2.0-2.8 fl. oz. 4.5-7 oz.	Aphids and plant bugs only. Peach twig borer.
tarnished plant bug		Dipel DF ^{OMRI}	11A	0.5-2 lb.	Peach twig borer.
and stink bug. If		Entrust ^{OMRI}	5	1.25-2.5 oz.	Peach twig borer.
needed, make		Javelin WG ^{OMRI}	11A	0.25-4 lb.	Peach twig borer.
application before		Mustang-Maxxr	ЗА	1.28-4.0 fl. oz.	
any blooms open.		Pasada 1.6F	4A	4.0-8.0 fl. oz.	Pasada is for tarnished plant bug, San Jose scale, green June beetles, and aphids. Can cause suppression of stink bugs and plum curculio.
		Pounce 25WP ^r Silencer ^r	3A 3A	6.4-16 oz. 2.56-5.12 fl. oz.	Tarnished plant bug and peach twig borer.
	Brown Rot,	Abound	11	12.0-15.5 fl. oz.	
	Blossom Blight	Adament 50 WG	3+11	4-8 oz.	
		Aframe Plus Bravo	3+11 M05	14 fl. oz. 3.1-4.1 pts.	Bravo Weather Stik formulation. Others exist.
		Captan 50WP	M04	4-8 lb.	Other formulations exist. REI 24 hrs.
		Elevate 50 WDG	17	1.5 lb.	1-1.5 lb. in tank mix.
		Fontelis	7	14-20 fl. oz.	Labeled for peaches only.
		Indar 2F	3	6 oz.	
		Rally 40WSP	3	2.5-6 oz.	
		Rovral 4F	2	1-2 pt.	DO NOT make more than 2 applications per season
		Topsin-M WSB	1	1-1.5 lb.	REI 2 days. Do not apply more than 4lb/A
		Vangard WG Ziram 76DF	9 M03	5 oz. 4.5-8 lb.	
FULL BLOOM: 50% - 100% bloom.	Brown Rot, Blossom Blight				Same as PRE-BLOOM OR EARLY BLOOM
PETAL FALL SPRAY: Apply when 50 to 75%		1			See notes on monitoring for plum curculio at end of table
of the petals have		Asana XL ^r	ЗА	4.8-14.5 fl. oz.	
fallen.		Avaunt eVo	22A	5-6 oz	Plum curculio.
Insecticide and fungicion	de	Baythroid XL ^r	ЗА	2.0-2.4 oz.	2.4-2.8 fl. oz. for plum curculio. Max. 5.6 fl. oz./A/ season.
materials may be		Beleaf 50SG	29	2.0-2.8 oz.	Aphids and plant bugs only.
combined starting with		Danitol ^r	3A	10.7-21.3 fl. oz.	
petal fall and con-		Imidan 70-W	1B	2.125-4.25 lb.	Plum curculio.
			1A	3 pt.	Labeled for peaches only.
		Lannate LV ^r			•
tinuing through cover sprays. (Read and		Mustang Maxx ^r	ЗА	1.28-4.0 fl oz	Pacada is for tarnished plant bug. San Jaco acala
sprays. (Read and follow all label		Mustang Maxx ^r Pasada	3A 4A	1.28-4.0 fl oz 4.0-8.0 fl. oz.	Pasada is for tarnished plant bug, San Jose scale, green, lung heatles, and applies. Suppression
sprays. (Read and		Mustang Maxx ^r	ЗА	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz.	Pasada is for tarnished plant bug, San Jose scale, green June beetles, and aphids. Suppression of stink bugs and plum curculio.
sprays. (Read and follow all label	Brown Rot	Mustang Maxx ^r Pasada Pounce 25WP ^r	3A 4A 3A	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz.	green June beetles, and aphids. Suppression
sprays. (Read and follow all label	Brown Rot and Scab	Mustang Maxx ^r Pasada Pounce 25WP ^r Warrior II ^r Abound Aframe Plus	3A 4A 3A 3A 11 3+11	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio.
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WP ^r Warrior II ^r Abound Aframe Plus Bravo	3A 4A 3A 3A 11 3+11 M05	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available.
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WP ^r Warrior II ^r Abound Aframe Plus Bravo Captan 50WP	3A 4A 3A 3A 11 3+11 M05 M04	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb.	green June beetles, and aphids. Suppression of stink bugs and plum curculio.
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WP ^r Warrior II ^r Abound Aframe Plus Bravo Captan 50WP Indar 2F	3A 4A 3A 3A 11 3+11 M05 M04 3	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available.
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WP ^r Warrior II ^r Abound Aframe Plus Bravo Captan 50WP Indar 2F Luna Sensation	3A 4A 3A 3A 11 3+11 M05 M04 3 7+11	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz. 5.0-7.6 fl. oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available. Other formulations exist. REI 24 hrs.
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WPr Warrior IIr Abound Aframe Plus Bravo Captan 50WP Indar 2F Luna Sensation Merivon	3A 4A 3A 3A 11 3+11 M05 M04 3 7+11 7+11	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz. 5.0-7.6 fl. oz. 4-6.7 fl. oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available. Other formulations exist. REI 24 hrs.
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WPr Warrior IIr Abound Aframe Plus Bravo Captan 50WP Indar 2F Luna Sensation Merivon Pristine	3A 4A 3A 3A 11 3+11 M05 M04 3 7+11 7+11	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz. 5.0-7.6 fl. oz. 4-6.7 fl. oz. 10.5-14.5 oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available. Other formulations exist. REI 24 hrs. Check label for tank mix and adjuvant compatibility
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WPr Warrior IIr Abound Aframe Plus Bravo Captan 50WP Indar 2F Luna Sensation Merivon	3A 4A 3A 3A 11 3+11 M05 M04 3 7+11 7+11	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz. 5.0-7.6 fl. oz. 4-6.7 fl. oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available. Other formulations exist. REI 24 hrs. Check label for tank mix and adjuvant compatibility. Brown rot. Do not apply more than 3.25lb/A/year. No more than two applications per season. May
sprays. (Read and follow all label		Mustang Maxx' Pasada Pounce 25WP' Warrior II' Abound Aframe Plus Bravo Captan 50WP Indar 2F Luna Sensation Merivon Pristine Rally 40WSP	3A 4A 3A 3A 11 3+11 M05 M04 3 7+11 7+11 3	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz. 5.0-7.6 fl. oz. 4-6.7 fl. oz. 10.5-14.5 oz. 2.5-6 oz.	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available. Other formulations exist. REI 24 hrs. Check label for tank mix and adjuvant compatibility Brown rot. Do not apply more than 3.25lb/A/year. No more than two applications per season. May not be applied after petal fall. Brown rot. Do not make more than three
sprays. (Read and follow all label		Mustang Maxx ^r Pasada Pounce 25WPr Warrior II ^r Abound Aframe Plus Bravo Captan 50WP Indar 2F Luna Sensation Merivon Pristine Rally 40WSP Rovral 4F	3A 4A 3A 3A 11 3+11 M05 M04 3 7+11 7+11 3 2	1.28-4.0 fl oz 4.0-8.0 fl. oz. 6.4-16 oz. 1.28-2.56 fl. oz. 12.0-15.5 fl. oz. 14 fl. oz. 3.1-4.1 pts 4-8 lb. 6 fl. oz. 5.0-7.6 fl. oz. 4-6.7 fl. oz. 10.5-14.5 oz. 2.5-6 oz. 1-2 pts	green June beetles, and aphids. Suppression of stink bugs and plum curculio. Weather Stik formulation. Others available. Other formulations exist. REI 24 hrs. Check label for tank mix and adjuvant compatibility. Brown rot. Do not apply more than 3.25lb/A/year. No more than two applications per season. May not be applied after petal fall.

Application and Timing	Pests Involved	Material	Group	Rate/Acre	Comments
SHUCK-SPLIT:	Plum Curculio or	Asana XL ^r	3	4.8-14.5 fl. oz.	
Apply when	Oriental fruit moth*	Avaunt eVo	22	5.6-6.0 oz.	High rate for Oriental fruit moth.
approximately 3/4	(see footnote at	Imidan 70-W	1B	2.125-4.25 lb.	
of shucks have split and are	end of table)	Intrepid 2F	18	10-16 fl oz.	For Oriental fruit moth and other caterpillar insects only.
shedding. About		Mustang-Maxx ^r	3A	1.28-4.0 fl oz	
7 to 10 days after		Pounce 25WPr	3	6.4-16 oz	Do not apply more than .75lb ai/A/season.
petal fall.		Silencer	3	2.56-5.12 fl. oz.	
		Warrior II ^r	3	1.28-2.56 fl. oz.	
	Tarnished plant bug		3A	4.8-14.5 fl. oz.	
	Stink bug	BaythroidXLr	3A	2.0-2.4 fl oz.	Do not apply more than 5.6 fl oz/A/season.
		Beleaf 50SG	29	2.0-2.8 oz.	Aphids and plant bugs only.
		Lannate LV ^r	1A 3A	3 pt. 1.28-4.0 fl. oz.	Labeled for peaches only.
		Mustang-Maxx ^r Pasada 1.6F	4A	4.0-8.0 fl oz.	8.0 fl. oz. for stink bug, supression only.
		Pounce 25WPr	3A	6.4-16 oz.	Tarnished plant bug only.
		Silencer ^r	3A	2.56-5.12 fl. oz.	
SHUCK-SPLIT: Apply when app-	Brown Rot and Scab	Abound Aframe Plus	11 3+11	12.0-15.5 fl. oz. 14 fl. oz.	
roximately three-	and ocab	Bravo	M05	3.1-4.1 pts.	Weather Stik formulation. Bravo should not be applied
fourths of shucks		Diavo	WICO	0.1 4.1 pto.	after shuck split.
have split and are		Captan 50WP	M04	4-8 lb.	Other formulations exist. REI 24 hrs.
shedding. About		Indar 2F	3	6 fl. oz.	
7 to 10 days after		Luna Sensation	7+11	5.0-7.6 fl. oz.	
petal-fall.		Merivon	7+11	4-6.7 fl. oz.	Check label for tank mix and adjuvant compatibility.
		Pristine	7+11	10.5-14.5 oz.	Drawn and Do not comb. many their 0.05lb/A/.com
		Rally 40WSP Scala SC	3 9	2.5-6 oz. 9-18 fl. oz.	Brown rot. Do not apply more than 3.25lb/A/year. Brown rot. Do not make more than three applications/
		Topsin-M WSB	1	1-1.5 lb	year. REI 2 days. Do not apply more than 4lb/A/year.
		Ziram 76DF	M03	4.5-8 lb	TIET 2 days. Do not apply more than 415/74 year.
	Bacterial Leaf and Fruit Spot	FireLine 17 WP Mycoshield	41 41	18 oz.	See label. 21-day PHI. See label. 21-day PHI.
SECOND AND LATE		Peach twig borer	Asana >	(L r	3A 4.8-14.5 fl. oz.
COVER SPRAYS:	(PTB) or Oriental	BaythroidXL ^r	3A	2.0-2.4 oz.	PTB 2.4-2.8 fl oz. Max 5.6 fl oz/A/season.
Apply at 10 to 14	fruit moth* (OFM)	DelegateWG	5	4.5-7 oz.	6-7 oz. for OFM
day intervals.		Dipel DF ^{OMRI}	11A	0.5-2.0 lb.	
		Entrust COMBI	5	1.25-2.5 oz.	
		Entrust SCOMRI	5 1B	4-8 oz. 2.125-4.25 lb.	
		Imidan 70-W Intrepid 2F	1B 18	2.125-4.25 lb. 8-16 fl. oz.	10-16 fl. oz. for OFM
		Javelin WG ^{OMRI}	11A	0.25-4 lb.	10-10 II. 02. 101 OI W
		Lannate LV ^r	1A	3 pt.	Peaches only. OFM only.
		Mustang-Maxx ^r	3A	1.28-4.0 fl. oz.	Todonos only. Or in only.
		Pounce 25WPr	3A	6.4-16 oz.	Do not apply more than .75 lb. ai./A/season.
		Sevin 4F	1A	4-5 qt.	44.7
		Silencer	ЗА	2.56-5.12 fl. oz.	
		Warrior II ^r	ЗА	1.28-2.56 fl. oz.	
	Tarnished plant	Asana XL ^r	3A	4.8-14.5 fl. oz.	
	bug	BaythroidXLr	ЗА	2.0-2.4 fl. oz.	Max. 5.6 fl oz/A/season.
		Beleaf 50SG	29	2.0-2.8 oz.	
		Lannate LV ^r	1A	3 pt.	Peaches only.
		Mustang-Maxx ^r	3A	1.28-4.0 fl. oz.	
		Pasada 1.6F	4A	4.0-8.0 fl. oz.	De actional and a ST II and a
		Pounce 25WP ^r Sevin 4F	3A 1A	6.4-16 oz.	Do not apply more than .75 lb. ai./A/season. 2-3 qts.

Application and Timing	Pests Involved	Material	Group	Rate/Acre	Comments
Read label and follow instructions regarding maximum number of spray applications permitted	Brown Rot and Scab	Abound Aframe Plus Captan 50WP Indar 2F Luna Sensation	11 3+11 M04 3 7+11	12.0-15.5 fl. oz. 14 fl. oz. 4-8 lb. 6 fl oz. 5.0-7.6 fl. oz.	Other formulations exist. REI 24 hrs.
near harvest.		Merivon Pristine	7+11 7+11	4-6.7 fl. oz. 10.5-14.5 oz.	Check label for tank mix and adjuvant compatibility.
		Rally 40WSP	3	2.5-6 oz. year.	Brown rot only. Do not apply more than 3.25 lb./A/
		Scala SC	9	9-18 fl. oz. year.	Brown rot only. Do not make more than 3 applications/
		Topsin-M WSB Ziram 76DF	1 M03	1-1.5 lb. 4.5-8 lb.	REI 2 days. Do not apply more than 4lb/A/year.
Apply weekly.	Bacterial Leaf and Fruit Spot	FireLine 17 WP Mycoshield	41 41	18 oz.	See label. 21-day PHI. See label. 21-day PHI.
One-time spray. Mid-may timing is very important for control of greater peach tree borer.	Greater and lesse peach tree borer. See below for more information.	Lorsban 4Er Mustang-Maxxr	3A 1B 3A 3A 3A		Directed trunk and scaffold limb spray. Directed trunk and scaffold limb spray. Foliage spray. Foliage or targeted spray. Foliage or targeted spray.
JUNE AND SUMMER SPRAYS:	Mites	Acramite 50WS Envidor 2 SC Nexter SC Onager EC Vendex 50WPr	20D 23 21A 10A 12B	0.75-1.0 lb. 16-18 fl. oz. 7.5-17 oz. 12-24 oz. 1-2 lb.	Only one spray/season. 3 day PHI. Only one application/season. 7 day PHI. Only two sprays/year. 7 day PHI. Only one spray/year. 7 day PHI. Only two applications/season or 3 lb/A/year.
PRE-HARVEST: Three weeks before harvest	Brown rot	Fontelis Indar 2F Topsin-M WSB	7 3 1	14-20 fl. oz. 6 fl. oz. 1-1.5 lb.	7-14 day interval. Labeled for peaches only. 7-10 day interval 1-2 applications. Do not apply more than 4lb/A/year.
HARVEST:	Green June Beetles	Pasada 1.6F Sevin 4F	4A 1A	4.0-8.0 fl. oz. 2-3 qt.	See label for additional restrictions. 3-day PHI.

POST-HARVEST: Scholar SC Fungicide (12) is labeled to be used for control of post-harvest diseases.

READ ALL LABELS for important restrictions or warnings about tank mix compatibility or phytotoxicity before applying pesticides. THE LABEL IS THE LAW.

Restricted Use Pesticide. Must have a pesticide applicator's license to apply.

Organic Material Review Institute (OMRI) listed for organic production.

Do not apply during periods of high temperature or injury to foliage may occur.

^{*} Cidetrak pheromone dispensers may be used for oriental fruit moth (OFM) control, but must be attached to trees before first adult flight. See Oriental Fruit Moth below for more discussion on the method.

Chemical group classifications can be found at the following Web sites: Herbicides-http://www.plantprotection.org/hrac/; Insecticides-http://www.irac-online.org/; and Fungicides-http://www.frac.info/.

BEE PROTECTION PRECAUTIONS: Several insecticides listed are toxic to bees. Read and follow individual labels for specific bee protection measures for each product. Do not make insecticide applications during the blooming period for the preservation of pollinator populations, including bees. In addition, close attention should be paid at other times to the blooming of cover crops or weeds on the orchard floor. If weeds or cover crops are blooming, mow the orchard floor before application of pesticides.

GREATER AND LESSER PEACHTREE BORER CONTROL: In mid-May, apply 3 quarts Lorsban 4E in 100 gallons of water to trunks. Spray the trunks thoroughly from the large branches to the ground line (1.5 to 2 feet). Do not spray the fruit or leaves with Lorsban. Asana XL - Apply as directed trunk and scaffold limb spray. Thorough coverage of trunk and scaffold limbs is required. Do not spray the foliage.

Asana XL or Warrior II applications in September are also effective in controlling Lesser Peachtree Borer.

Lorsban 4E may also be used as a preplant dip application for nonbearing peach trees at the equivalent application rate of 3 qts/100 gallons of water. Dip trees several inches above the grafting bud scar and plant immediately.

PEACH TWIG BORER: Bloom time applications of *Bacillus thuringiensis* (B.t.) or Entrust for peach twig borer in combination with treatments for brown rot can help in cutting application costs. Pay attention to spray timing to avoid foraging bees and other pollinators. Also, dormant season applications of oil plus an insecticide like Dimilin, Entrust or Delegate can seriously reduce infestations of peach twig borer.

ORIENTAL FRUIT MOTH: The earliest indication of injury by this insect is similar to that of the peach twig borer and consists of a "dyingback" of new growth in the spring. The worms found burrowing in the twigs are pinkish or creamy-white with brown heads. One larvae/10 terminals/tree should be considered an economic infestation. Later generations of the worm enter the fruit near the stem before the fruit ripens. The fruit may look perfect at the time of harvest, but breaks down shortly after packing.

Mating Disruption Strategy

Mating disruption is an alternate method of Oriental fruit moth control. Trece. Inc. has the Cidetrak OFM-L system which disrupts the normal mating communication between adult male and female moths, reduces fertile egg laying, suppresses larval infestation, and reduces the need for insecticide application. Application of the Cidetrak systems calls for a minimum of 100 dispensers per acre or no more than 200 dispensers per acre per year. These dispensers are attached to lateral branches in the upper one-third of the tree canopy. Dispensers are applied 2-3 days after trap capture of the first male moth using pherocon 1C traps. If the cropping season goes beyond 120 days, a second application should be made. For maximum effectiveness, remove and destroy infested fruit from trees and the orchard floor. Growers electing to use this strategy to manage OFM should monitor carefully around external sources of infestation that are not treated with the Cidetrak, and should be prepared to treat with insecticides if infestations coming from these outside sources

PLUM CURCULIO: Early detection of this important pest should be conducted using pyramid or screen traps to monitor for adult weevils. The construction and utility of these traps for this purpose are outlined in OSU Fact Sheet EPP-7190 - "Monitoring Adult Weevil Populations in Pecan and Fruit Trees in Oklahoma."

BACTERIAL SPOT: The disease attacks the leaves, fruits and stems. There is a varietal difference in susceptibility. The best defense against bacterial spot is to plant resistant varieties. See Fact Sheet HLA-6210 for resistant varieties that grow well in Oklahoma.

For detailed information on using pesticides safely, see Extension Fact Sheet EPP-7450, "Pesticides Can Be Used Safely," and Extension Fact Sheet EPP-7457, "Toxicity of Pesticides."

Table 1. Additional Pesticide Information

INSECTICIDE	IRAC MOA	Chemical Name	REI*	PHI**	FUNGICIDE	FRAC MOA	Chemical Name	REI*	PHI**
Acramite 50 WS	20D	Bifenazate	12 hrs	3 days	Abound	=	Azoxystrobin	4 hrs	0 days
Asana XL'	3A	Esfenvalerate	12 hrs	14 days	Adament 50WD	3+11	Tebuconazole+	12 hrs	1 days
Avaunt eVo	22A	Indoxacarb	12 hrs	14 days			Trifloxystrobin		
BaythroidXL	3A	Cyfluthrin	12 hrs	7 days	Aframe Plus	3+11	Azoxystrobin+	12 hrs	0 days
Beleaf 50SG	29	Flonicamid	12 hrs	14 days			Propiconazole		
Danitoľ	3A	Fenpropathrin	24 hrs	3 days	Bravo Weather Stik	M05	Chlorothalonil	12 hrs	N/A
Delegate WG	2	Spinotram	4 hrs	1 days	Captan 50 WP	M04	Captan	24 hrs	0 days
Dipel DFOMRI	11A	Bt ssp. kurstaki	4 hrs	0 days	Champ WGOMRI	M01	Copper Hydroxide		
Entrust, SCOMRI	2	Spinosad	4 hrs	1 days	Elevate 50WDG	17	Fenhexamid	12 hrs	0 days
Envidor 2SC	23	Spirodiclofen	12 hrs	7 days	Ferbam	M03	Ferbam	24 hrs	21 days
Esteem 0.86SC	7C	Pyriproxyfen	12 hrs	14 days	Fireline 17WP	41	Oxytetracycline	12 hrs	21 days
Imidan 70-W	18	Phosmet	4 days	14 days	Fontelis Peaches	7	Penthiopyrad	12 hrs	0 days
Intrepid 2F	18	Methoxyfenozide	4 hrs	7 days	Indar 2F	က	Fenbuconazole	12 hrs	0 days
Javelin WGOMRI	11A	Bt. ssp. kurstaki	4 hrs	0 days	Kocide	MO1	Copper hydroxide	48 hrs	N/A
Lannate LV ^{r Peaches}	14	Methomyl	4 days	4 days	Luna Sensation	7+11	Fluopyram+	12 hrs	1 days
Lorsban 4E'	18	Chlorpyrifos	4 days	14 days			Trifloxystrobin		
Movento	23	Spirotetramat	24 hrs	7 days	Merivon	7+11	Fluxapyroxad+	12 hrs	0 days
Mustang-Maxx ^r	3A	Zeta-cypermethrin	12 hrs	14 days			Pyraclostrobin		
Nexter SC	21A	Pyridaben	12 hrs	7 days	Mycoshield	41	Calcium oxytetracycline	12 hrs	21 days
Onager	10A	Hexythiazox	12 hrs	7 days	Pristine	7+11	Pyraclostrobin+	12 hrs	0 days
Pasada 1.6 F	4 A	Imidacloprid	12 hrs	0 days			Boscalid		
Pounce 25WPr	3A	Permethrin	12hrs	14 days	Rally 40WSP	က	Myclobutanil	24 hrs	0 days
Sevin 4F	1A	Carbaryl	12 hrs	3 days	Rovral 4F	2	Iprodione	24 hrs	* * *
Silencer	3A	Lambda-cyhalothrin	24 hrs	14 days	Scala SC	<u></u>	Pyrimethanil	12 hrs	2 days
Vendex 50WPr	12B	Febutatin-oxide	48 hrs	14 days	Topsin-M WSB	-	Thiophanate-methyl	2 days	1 days
Warrior II	3A	Lambda-cyhalothrin	24 hrs	14 days	Vangard WG	<u></u>	Cyprodinil	12 hrs	2 days
					Ziram 76 DF	M03	Ziram	48 hrs	14 days

r Restricted Use Pesticide. Must have a pesticide applicator's license to apply.

OMRIOrganic Materials Review Institute (OMRI) listed for organic production.

* REI = Re-entry interval. Same for both peaches and nectarines unless otherwise noted.

N/A = These fungicides may not be applied after shuck split.
Chemical classifications can be found at the following Web sites: Herbicides-http://www.plantprotection.org/hrac/; Insecticides-http://www.irac-online.org/; and Fungi-cides-http://www.frac.info/.

^{**}PHI = Pre-Harvest Interval – number of days required from last application to harvest. PHI same for both peaches and nectarines unless otherwise noted.

^{***} Rovral may not be applied after petal fall

The Oklahoma Cooperative Extension Service Bringing the University to You!

The Cooperative Extension Service is the largest, most successful informal educational organization in the world. It is a nationwide system funded and guided by a partnership of federal, state, and local governments that delivers information to help people help themselves through the land-grant university system.

Extension carries out programs in the broad categories of agriculture, natural resources and environment; family and consumer sciences; 4-H and other youth; and community resource development. Extension staff members live and work among the people they serve to help stimulate and educate Americans to plan ahead and cope with their problems.

Some characteristics of the Cooperative Extension system are:

- The federal, state, and local governments cooperatively share in its financial support and program direction.
- It is administered by the land-grant university as designated by the state legislature through an Extension director.
- Extension programs are nonpolitical, objective, and research-based information.

- It provides practical, problem-oriented education for people of all ages. It is designated to take the knowledge of the university to those persons who do not or cannot participate in the formal classroom instruction of the university.
- It utilizes research from university, government, and other sources to help people make their own decisions.
- More than a million volunteers help multiply the impact of the Extension professional staff.
- It dispenses no funds to the public.
- It is not a regulatory agency, but it does inform people of regulations and of their options in meeting them.
- Local programs are developed and carried out in full recognition of national problems and goals.
- The Extension staff educates people through personal contacts, meetings, demonstrations, and the mass media.
- Extension has the built-in flexibility to adjust its programs and subject matter to meet new needs.
 Activities shift from year to year as citizen groups and Extension workers close to the problems advise changes.

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