



Current Report

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Commercial Peach-Nectarine Insect and Disease Control 2014

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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. In 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.

Application and Timing	Pests Involved	Amount of Materials Needed		Comments
		Material (Group)*	Per Acre	
LATE FALL: Apply in October-November when the temperature is above 40 F.	Peach Leaf Curl	Bravo	3-4 pts	Apply amount of chemical in a minimum of 150 gallons per acre.
		Kocide DF (M4)	8-16 lb	
DORMANT: Apply when the trees are dormant and the temperature is above 40 F. Apply fungicides in spring before buds begin to swell.	San Jose Scale	Esteem 0.86EC (7D)	13-16 oz	For Peach leaf curl and/or scale insect control apply a minimum of 150 gallons of liquid per acre.
		Lorsban 4E ¹ (1B)	1.5 pt	
		(Can also be used with oil).		
		Movento(23)	6.0-9.0oz	
	Forbes Scale	Pasada 1.6F (4A)	4.0-8.0 oz	Oils can be applied before buds break. If buds are just beginning to open (1-5% bud swell), adjust rates downward (e.g., 1.5 gals/A).
		Superior oil*	2-4 gal	
		Dormant oil*	4.5-6 gal	
	Peach Leaf Curl	Lime Sulfur ¹ (M4)	See label	
		Superior oil*	2-4 gal	
		Bravo	3-4 pts	
PRE-BLOOM OR EARLY BLOOM: Flower buds show pink.	Tarnished plant bug Peach twig borer	Kocide DF (M4)	12-24 lb	Plant bugs and aphids only. Javelin is for Peach twig borer only. Pasada is for tarnished plant bug, san jose scale, green june beetles and aphids. Can cause suppression of stink bugs and plum curculio. PTB only.
		Ziram 76DF (M4)	3.75-6 lb	
		Adjourn ^r (3)	4.8-14.5oz	
		Asana XL ^r (3)	4.8-14.5 oz	
		BaythroidXL ^r (3)	2.0-2.8oz	
		Beleaf 50SG (9C)	2.0-2.8 oz	
		DelegateWG(5)	3-7oz	
		Dipel ES (11B2)	1-4 pt	
		Javelin WG (11B2)	0.25-4 lb	
		Lorsban 4E ^r (1B)	1.5 pt	
		Mustang-Max ^r (3)	1.28-4.0 oz	
		Pasada 1.6F (4A)	4.0-8.0 oz	
		Pounce 3.2 EC ^r (3)	4-16 oz	
		(peaches only)		
Silencer ^r (3)	2.5-5.12oz			

Application and Timing	Pests Involved	Amount of Materials Needed		
		Material (Group)	Per Acre	Comments
(cont'd)	Stink bug	Mustang-Max ¹ (3) Silencer ¹ (3)	1.28-4.0 oz 2.5-5.12oz	PTB only
	Brown Rot, Blossom Blight	Abound (11) Bravo Captan 50WP (M4) Elite 45DF (3) Funginex (3) Indar 75 WSP (3) Nova 40W (3) Orbit (3) Rovral 4F (2) Topsin-M 70W (1) Vanguard W (9) Ziram 76DF (M4)	6.2-9.2 oz 3-4 pts 4-8 lb 4-8 oz See label 2 oz 6 oz 4 oz 1-2 pt 1.5-2.25 lb 5 oz 4.5-8 lb	DO NOT make more than 2 applications per season
FULL BLOOM: 50% - 100% bloom.	Brown Rot, Blossom Blight			Same as PRE-BLOOM OR EARLY BLOOM
PETAL FALL SPRAY: Apply when 50 to 75% of the petals have fallen. Insecticide and fungicide materials may be combined starting with Petal Fall and continuing through cover sprays (read and follow all label directions.	Plum Curculio	Adjourn ¹ (3) Asana XL ¹ (3) BaythroidXL ¹ (3) Imidan 70WP (1B) Mustang-Max ¹ (3) Pounce ² (3) (peaches only) Silencer ¹ (3) Warrior ¹ 1EC (3)	4.8-14.5oz 4.8-14.5 oz 2.4-2.8oz 2.125-4.25 lb 1.28-4.0 oz 4-16 oz 2.5-5.12oz 2.56-5.12 oz	See notes on monitoring for plum curculio at end of section.
	Tarnished plant bug	Adjourn ¹ (3) Ambush ¹ 2E (3) (peaches only) Asana XL ¹ (3) Beleaf 50SG (9C) Lannate LV ¹ (1A) (peaches only) Mustang-Max ¹ (3) Pasada 1.6F (4A) Pounce 3.2EC ² (3) (peaches only)	4.8-14.5oz 6.4-19.2 oz 4.8-14.5 oz 2.0-2.8 oz 3-6 pts 1.28-4.0 oz 4.0-8.0 oz 4-16 oz	
	Brown Rot and Scab	Abound (11) Bravo Captan 50WP (M4) Elite 45DF (3) Funginex (3) Indar 75 WSP (3) Nova 40W (3) Orbit (3) Rovral 4F (2) Topsin-M 70W (1) Ziram 76DF (4)	6.2-9.2 oz 3-4 pts 4-8 lb 6 oz See label 2 oz 6 oz 4 oz 1-2 pts 1.5-2.25 lb 4.5-8 lb	Brown rot only Brown rot only Brown rot only Brown rot only DO NOT make more than two applications per season.
SHUCK-SPLIT: Apply when approximately three-fourths of shucks have split and are shedding about 7 to 10 days after Petal Fall.	Plum Curculio or Oriental fruit moth* (see footnote at end of section)	Intrepid 2F (18) Adjourn ¹ (3) Ambush 2E ¹ (3) (peaches only) Asana XL ¹ (3) Imidan 70WP (1B) Mustang-Max ¹ (3) Pounce 3.2EC ² (3) (peaches only)	10-16 oz 4.8-14.5 oz 6.4-19.2 oz 4.8-14.5 oz 2.125-4.25 lb 1.28-4.0 oz 4-12 oz	Intrepid is for oriental fruit moth and other caterpillar pests only.

Application and Timing	Pests Involved	Amount of Materials Needed		
		Material (Group)	Per Acre	Comments
SHUCK-SPLIT: (cont'd)		Silencer ^r (3)	2.56-5.12 oz	
		Warrior ^r 1EC (3)	2.56-5.12 oz	
	Tarnished plant bug	Adjourn ^r (3)		
		Ambush 2E ^r (3) (peaches only)	6.4-19.2 oz	
		Asana XL ^r (3)	4.8-14.5 oz	
		BaythroidXL ^r (3)	2.0-2.8 oz	
		Beleaf 50SG (9C)	2.0-2.8 oz	
		Lannate LV ^r (1A) (peaches only)	3-6 pt	
		Mustang-Max ^r (3)	1.28-4.0 oz	
		Pasada 1.6F (4A)	4.0-8.0 oz	
		Pounce 3.2EC ^{r2} (3) (peaches only)	4-12 oz	
	Stink bug	BaythroidXL ^r (3)	2.0-2.8oz	
		Lannate LV ^r (1A) (peaches only)	3-6 pt	
		Silencer ^r (3)	2.56-5.12 oz	
SHUCK-SPLIT: Apply when approximately three-fourths of shucks have split and are shedding about 7 to 10 days after Petal Fall.	Brown Rot and Scab	Abound (11)	6.2-9.2 oz	
		Bravo	3-4 pts	Bravo should not be applied after shuck split.
		Captan 50WP (M4)	4-8 lb	
		Elite 45DF (3)	4-6 oz	Brown rot only
		Funginex (3)	See label	Brown rot only
		Indar 75 WSP (3)	2 oz	
		Nova 40W (3)	6 oz	Brown rot only
		Orbit (3)	4 oz	Brown rot only
		Topsin-M 70W (1)	1.5-2.25 lb	
		Ziram 76DF (M4)	4.5-8 lb	
	Bacterial Leaf and Fruit Spot	Mycoshield		See label
SECOND AND LATER COVER SPRAYS: Apply at 10 to 14 day intervals.	Peach twig borer (PTB) or Oriental fruit moth* (OFM)	Adjourn ^r (3)	4.8-14.5oz	
		Ambush 2E ^r (3) (peaches only)	6.4-19.2 oz	
		Asana XL ^r (3)	4.8-14.5 oz	
		BaythroidXL ^r (3)	2.4-2.8 oz	
		DelegateWG(5) (6-7 oz) for OFM	3-7 oz	
		Dipel ES (11B2)	1.25-2.5 oz	
		Entrust (5)	1-4 pts	
		Imidan 70WP (1B)	2.125-4.25 lb	
		Intrepid 2F (18)	8-16 oz	
		Javelin WG (11B2)	0.25-4 lb	
		Lannate LV ^r (1A) (peaches only) (OFM only)	3-6 pt	
		Lorsban 4E ^r (1B) (PTB only)	1.5 pt	
		Mustang-Max ^r (3)	1.28-4.0 oz	
		Pounce 3.2EC ^{r2} (3) (peaches only)	4-12 oz	
		Sevin 4F (1A)	4-5 qts	
		Silencer ^r (3)	2.56-5.12 oz	
		Warrior ^r 1EC (3)	2.56-5.12 oz	

Application and Timing	Pests Involved	Amount of Materials Needed		Comments
		Material (Group)	Per Acre	
	Tarnished plant bug	Adjourn ^r (3)	4.8-14.5oz	
		Ambush 2E ^r (3) (peaches only)	6.4-19.2 oz	
		Asana XL ^r (3)	4.8-14.5 oz	
		BaythroidXL ^r (3)	2.0-2.4 oz	
		Beleaf 50SG (9C)	2.0-2.8 oz	
		Lannate LV ^r (1A) (peaches only)	3-6 pt	
		Mustang-Max ^r (3)	1.28-4.0 oz	
		Pasada 1.6F (4A)	4.0-8.0 oz	
		Pounce 3.2EC ^{r2} (3) (peaches only)	4-12 oz	
		Sevin 4F (1A)	4-5 qts	
	Peach tree borer	Adjourn ^r (3)	4.8-14.5 oz	See discussion at end of section.
		Asana XL (3)	4.8-14.5 oz	
		Lorsban 4E ^r (1B)	3 qts	
		Mustang-Max ^r (3)	1.28-4.0 oz	
		Silencer ^r (3)	2.56-5.12 oz	
		Warrior ^r 1EC (3)	2.56-5.12 oz	
Read label and follow instructions regarding maximum number of spray applications permitted near harvest.	Brown Rot and Scab	Abound (11)	6.2-9.2 oz	
		Captan 50WP (M4)	4-8 lb	
		Funginex (3)	See label	Brown rot only
		Indar 75 WSP (3)	2 oz	
		Nova 40W (3)	6 oz	Brown rot only
		Orbit (3)	4 oz	Brown rot only
		Topsin-M 70W (1)	1.5-2.25 lb	
		Ziram 76DF (M4)	4.8-8 lb	
Apply weekly.	Bacterial Leaf and Fruit Spot	Mycoshield		See label
JUNE AND SUMMER SPRAYS:	Mites	Acramite 50WS (25)	0.75-1.0 lb	
		Onager 1EC (10A)	12-24 oz	
		Vendex 50WP ^r (12B)	1-2 lb	
PRE-HARVEST: (3 weeks before harvest)	Brown rot	Indar 75 WSP (3)	2 oz	7-10 day interval
		Nova 40W (3)	6 oz	7-10 day interval
		Orbit (3)	4 oz	1-2 applications
		Topsin-M 70W (1)	1.5-2.25 lb	1-2 applications
HARVEST:	Green June Beetles	Pasada 1.6F (4A)	4.0-8.0 oz	See label for additional restrictions.
		Sevin 4F (1A)	4-5 qts	
		Silencer ^r (3)	2.56-5.12oz	

^r Restricted Use Pesticide.

¹ Do not apply during periods of high temperature or injury to foliage may occur.

² Do not apply more than 3.0 pounds active ingredient per acre per season.

* Isomate-M or Checkmate-M pheromone dispensers may be used for oriental fruit moth (OFM) control, but must be attached to trees before first adult flight. Hang in branches at 400 ties/A.

MOA Group Tables start on page 46 of E-834 Extension Agent's Handbook of Insect, Disease and Weed Control.

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/>.

GREATER 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). Asana or Warrior applications in September are also effective in controlling Lesser Peachtree Borer. Do not spray the fruit or leaves with Lorsban.

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.

For detailed instructions see Fact Sheet EPP-7319, "Home Tree Fruit Production and Pest Management."

ORIENTAL FRUIT MOTH: The earliest indication of injury by this insect is similar to that of the peach twig borer and consists of a "dying-back" 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.

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 #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.

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."

POST HARVEST: Scholar Fungicide is labeled to be used for control of post harvest diseases.

Table 1. Limitations — Number of Days Before Harvest.
Days from last application to harvest.

CHEMICALS*	PEACHES	NECTARINES	CHEMICALS*	PEACHES	NECTARINES
Abound	0	0	Lannate LV [†]	4	—
Adjourn [†]	14	14	Lorsban [†]	14	14
Ambush [†]	5	—	Movento	7	7
Apollo SC	21	21	Mustang-Max [†]	14	14
Asana XL [†]	14	14	Mycoshield	21	—
BaythroidXL	7	7	Nova 40W	0	0
Beleaf 50SG	14	14	Onager	28	28
Bravo	N/A	N/A	Orbit	0	0
Captan	0	0	Pasada	0	0
Carzol	21	14	Pounce [†]	7	0
Delegate	14	14	Phaser 50W	30	30
Dipel	0	0	Pyramite 60WP	7	7
Elite 45 DF	0	0	Rovral 4F	**	**
Entrust	14	14	Seize	14	14
Esteem	14	14	Sevin	3	3
Funginex 6.5%	0	0	Silencer [†]	14	14
Imidan 70WP	14	14	Topsin-M	1	1
Indar 75 WSP	0	0	Vendex 50WP [†]	14	14
Intrepid 2F	7	7	Warrior [†]	14	14
Intrepid	7	7	Ziram	14	14
Javelin	0	0			
Kocide	N/A	N/A			

[†] Restricted Use Pesticide.

* See label for other limitations.

** Rovral may not be applied after petal fall

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 **Fungicides**-<http://www.frac.info/>.

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Some characteristics of the Cooperative Extension system are:

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- 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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