

Current Report

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1979 PEACH, NECTARINE, PLUM, APRICOT & CHERRY DISEASE & INSECT CONTROL

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PEACH - NECTARINE

REVISED: January, 1979

APPLICATION AND TIMING	PESTS INVOLVED	QUANTITY OF MATERIALS TO MIX IN WATER TO MAKE 100 GALLONS OF SPRAY
DORMANT. Apply when the trees are dormant and temperature is above 40°F.	San Jose Scale Forbes Scale	4 gallons dormant spray oil ¹
	Peach leaf curl	Kocide 101 2-3 lb; or 8-8-100 Bordeaux; or Zineb 75W l lb; Dithane Z-78 2 lb
PRE-BLOOM (Flower buds show pink).	Lygus Bugs	Guthion 50W, 1 lb ²
PETAL FALL SPRAY. Apply when 50-75% of petals have fallen. ³	Scab	Orthocide 50W, 2 lb; or Captan 50WP, 2 lb; or Wettable Sulfur, 5-10 lb
	Plum Curculio and Plum Gouger	Guthion 50W, ½-3/4 lb; or Sevin 50W, 2 lb
	Brown Rot	Wettable Sulfur, 5-10 lb; or Orthocide 50W, 2 lb; or Captan 50WP, 2 lb; or Benlate 50W, .75-2 lb
SHUCK-SPLIT. Apply when around 3/4 of shucks have split and are shedding 10-14 days after petal fall.	Brown Rot and Scab	Same as Petal Fall spray
	Plum Curculio and Plum Gouger	Same as Petal Fall spray
FIRST COVER. Apply 2 weeks after shuck-split application.	Oriental Fruit Moth, Twig Borer, & Lesser Peach Tree Borer ⁴	Sevin 50W, 2 lb; or Guthion 50W, ½ - 3/4 lb
	Scab, Brown'Rot	Same as Petal Fall sprays above
SECOND COVER. Apply 2 weeks after first application.	Oriental Fruit Moth & Twig Borer	Same as First Cover sprays above
	Scab, Brown Rot	Same as Petal Fall sprays above
LATER COVER SPRAYS. Apply at 10-day intervals. See back page for waiting periods.	Oriental Fruit Moth	Same as First Cover sprays above
	Scab, Brown Rot	Same as Petal Fall sprays above
June	Mites (2 sprays may be needed)	Kelthane 35W, 1 lb; or Omite 30W, $1\frac{1}{2}$ lb
Harvest. Apply just before harvest in July and August.	Green Fruit Beetles	Sevin 50W, 2 lb

Liquid lime sulfur, 12 gals. in 100 gallons water, may be substituted for dormant spray oil or Bordeaux 28-8-100 and Kocide 101 to control peach leaf curl and scale.

3Guntion is DANGEROUS. Follow the manufacturer's instructions carefully.

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Imidan at 1.0-1.5 of 50W will control oriental fruit moth and twig borer.

PLUM

APPLICATION AND TIMING	PESTS INVOLVED	QUANTITY OF MATERIALS TO MIX IN WATER TO MAKE 100 GALLONS OF SPRAY
DORMANT. Apply when the trees are dormant and temperature is above 40°F .	San Jose Scale Forbes Scale	4 gallons dormant spray oil ¹
PRE-BLOOM. (Flower buds show pink).	Lygus Bugs	Guthion 50W, ½ 1b ²
SHUCK-SPLIT ³ . Apply when around 3/4 of the shucks have split and are shedding 10-14 days after petal fall.	Plum Curculio and Plum Gouger	Guthion 50W, ½-3/4 lb; or Sevin 50W, 2.0 lb
	Brown Rot	Wettable Sulfur, 6 lb ⁴ ; or Orthocide 50W, 2 lb; or Captan 50W, 2 lb; or Benlate 50W, 3/4-2 lb
FIRST COVER. Apply 2 weeks after shuck-split application.	Oriental Fruit Moth, Twig Borer & Lesser Peach Tree Borer	Sevin 50W, 2 lb; or Guthion 50W, ½- 3/4 lb
	Brown Rot	Same as Shuck-Split sprays above.
SECOND COVER. Apply 2 weeks after first application.	Oriental Fruit Moth Twig Borer	Same as First Cover sprays above.
	Brown Rot	Same as Shuck-Split sprays above.
LATER COVER SPRAYS. Apply at 10 day intervals. See Limitations.	Oriental Fruit Moth	Same as First Cover sprays above.
	Brown Rot	Same as Shuck-Split sprays above.
June	Mites (2 sprays may be needed)	Kelthane 35W, 1 lb; or Omite 30W, $1\frac{1}{2}$ lb
Harvest. Apply just before harvest in July and August.	Green Fruit Beetle	Sevin 50W, 2 1b

 $^{^1}$ Liquid lime sulfur, 12 gals. in 100 gallons of water, may be substituted for dormant spray oil or Bordeaux 8-8-100 to control plum pocket and scale

APRICOT

APPLICATION AND TIMING	PESTS INVOLVED	QUANTITY OF MATERIALS TO MIX IN WATER TO MAKE 100 GALLONS OF SPRAY
DORMANT. Apply when the trees are dormant and temperature is above 40°F.	San Jose Scale Forbes Scale	4 gallons dormant spray oil
PRE-BLOOM. (Flower buds show pink).	Lygus Bugs	Guthion 50W, ½ 1b ¹
SHUCK-SPLIT ² . Apply when around 3/4 of the shucks have split and are shedding 10-14 days after petal fall.	Plum Curcullio and Plum Gouger	Guthion 50W, ½-3/4 lb; or Sevin 50W, 2.0 lb
	Brown Rot	Orthocide 50W, 2 lb; or Captan 50WP, 2 lb; or Benlate 50W, 3/4-2 lb
FIRST COVER. Apply 2 weeks after shuck-split application.	Oriental Fruit Moth Twig Borer & Lesser Peach Tree Borer ³	Sevin 50W, 2 lb; or Guthion 50W, ½-3/4 lb
	Brown Rot	Same as Shuck-Split sprays above.
SECOND COVER. Apply 2 weeks after first application.	Oriental Fruit Moth Twig Borer	Same as First Cover sprays above.
	Brown Rot	Same as Shuck-Split sprays above.

 $^{^{2}}$ Guthion is DANGEROUS. Follow the manufacturer's instructions carefully.

 $^{^{3}}$ In Shuck-Split application, insecticide and fungicide materials can be combined.

 $^{^4}$ If dry weather prevails, omit sulfur. When temperature is above 90°F. use Captan 50W, 2 lbs.

APPLICATION AND TIMING	PESTS INVOLVED	QUANTITY OF MATERIALS TO MIX IN WATER TO MAKE 100 GALLONS OF SPRAY
LATER COVER SPRAYS. Apply at 10 day intervals. See limitations for waiting periods.	Oriental Fruit Moth	Same as First Cover sprays.
	Brown Rot	Same as Shuck-Split sprays.
June	Mites (2 sprays may be needed)	Kelthane 35W, 1 lb
Harvest. Apply just before harvest in July and August.	Green Fruit Beetle	Sevin 50W, 2 1b

 $^{^{1}\}mathrm{Guthion}$ is DANGEROUS. Follow the manufacturer's instructions carefully.

CHERRIES

APPLICATION AND TIMING	PESTS INVOLVED	QUANTITY OF MATERIALS TO MIX IN WATER TO MAKE 100 GALLONS OF SPRAY
DORMANT. Apply when the trees are dormant and temperature is above 40°F.	San Jose Scale Forbes Scale	4 gallons dormant spray oil
PETAL-FALL. Apply just after petal fall.	Leafspot (causes leaves to fall)	Cyprex 65W, ½ 1b; or Captan 50W, 2 1b; or Phaltan 50W, 2 1b; or Benlate 50W, .75-2.0 1b
SHUCK-SPLIT. Apply when most of the shucks have split and fallen, about one week after petal fall.	Leafspot (causes leaves to fall)	Cyprex 65W, $\frac{1}{2}$ $1b^{1}$; or Captan 50W, 2 1b; or Phaltan 50W, 2 1b; or Benlate 50W, .75-2.0 1b
	Powdery Mildew	Benlate 50W, .75-2.0 lb
	Curculio	Guthion 50W, ½ lb; or Sevin 50W, 2 lb
COVER SPRAY. Apply 2 weeks after shuck fall.	Leafspot (causes leaves to fall)	Same as Shuck-Split spray
	Powdery Mildew	Same as Shuck-Split spray
POST HARVEST. Apply immediately after the fruit is harvested. During the rainy seasons, make 1 or 2 additional applications.	Leafspot (causes leaves to fall	Same as Shuck-Split spray

Waiting period before harvest: Guthion - 15 days; Sevin - 1 day.

LIMITATIONS

CHEMICAL	NO. OF DAYS BEFORE HARVEST	CHEMICAL	NO. OF DAYS BEFORE HARVEST
Dormant Oil	Apply while trees are dormant	Sevin	Apricot, 3 days; Peach & Plum, 1 day None Apricot and Plums, 7 days; Peach, 14 days Peach only, waiting period 14 days Peaches, Apricots, 45 days Apricots, Peaches, 21 days; Plums, 7 days Peaches, 30 days
Bordeaux	Apply while trees are dormant	Sulfur	
Captan	None	Imidan	
Guthion	Apricot, Peach, 21 days; Plum, 15 days	Lorsban	
Kelthane	Apricot, Peach, 14 days; Plum, 7 days	Karathane	
Omite 30W	Peach, 14 days; Plum, 28 days	Thiodan	
Benlate	None	Zineb	

USE ALL PESTICIDES SAFELY - READ AND FOLLOW MANUFACTURER'S INSTRUCTIONS

 $^{^2\}mathrm{In}$ Shuck-Split application, insecticide and fungicide materials can be combined.

 $^{^{3}\}mbox{Imidan}$ at 1.0-1.5 lb of 50W will control oriental fruit moth and twig borer.

 $^{^{1}}$ Do not graze areas treated with Benlate. Cyprex 65W used at excessively high temperatures and humidity may cause spotting of foliage and fruit.

PEACH TREE BORER CONTROL: Thiodan 50W, 1 lb. in 100 gallons of water or Lorsban 4E, 3 qts. in 100 gallons water. Three applications, mid-June, mid-July and mid-August for Thiodan. Only need spray Lorsban one time in late May. Spray thoroughly the trunks from the large branches to the ground line ($1\frac{1}{2}$ to 2 feet). DO NOT SPRAY THE FRUIT with Lorsban.

If the borer spray program is not followed, PDB crystals applied in October will kill the peach tree borer. Crystals, $\frac{1}{2}$ to $1\frac{1}{2}$ oz. are used around each tree depending upon its age and size. Ask your County Director for instructions in using PDB for peach tree borer control.

LESSER PEACH TREE BORER AND SHOT HOLE BORER CONTROL: Peach and plum trees maintained in a healthy, vigorous condition will have fewer borer attacks. Lesser peach tree borers work above ground level in crotches and branch scars. Shothole borers feed underneath the bark of unhealthy weak wood. Keep the trees growing actively by pruning, cultivating and watering and by making generous applications of commercial fertilizer by February 15. Sevin or Guthion will control lesser peach tree borer if used in cover sprays.

GREEN FRUIT BEETLE: Serious damage is often caused to the ripening fruit by this pest. It is a large, green beetle with the body margins bronze to yellow, nearly one inch long and about one-half as broad. The winter and spring are passed as a grub in the soil and the adult beetle emerges during July and August. The eggs are laid in soil rich in decaying matter. Sevin is used to control this pest.

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. 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. Control the oriental moth by using Sevin, Guthion or Imidan.

BACTERIAL SPOT: The disease attacks the leaves, fruits, and stems. No completely satisfactory control is known for the disease. There is a varietal difference to susceptibility.

A certain degree of control can be obtained by spraying the trees in the fall (when half the leaves have fallen). For dormant application, apply Kocide 101 at 2 lbs. or Kocide 404 at 2 qts/100 gals. At first and second cover sprays use Kocide 101 at $\frac{1}{4}$ lb.

or Kocide 404 at ½ qt/100 gallons. Do not spray later than three weeks prior to harvest. Do not use at rates above those recommended after bloom. During wet spring, delay first application until second cover spray to reduce potential phytotoxicity.

BROWN ROT OF PEACH, APRICOT, PLUM AND OTHER STONE FRUITS: Brown rot is the most serious problem of stone fruits. The brown rot organism causes blossom and twig blight, canker and fruit rot. The fruit rot disease phase is more prominent than the blossom phase. As the fruit approaches maturity, the first evidence of the rot is the appearance of small circular brown spots. Under moist conditions these spots enlarge rapidly; ash-colored tufts break through the skin and give the fruit a brownish-gray appearance. These spots may cover a large portion of the fruit, making it worthless. The white soft flesh varieties and later maturing varieties are the most susceptible. With these varieties, under moist conditions, sulfur sprays must be continued to harvest.

PEACH LEAF CURL: Copper hydroxide (Kocide 101) 2-3 lb/100 gal. Apply at leaf fall and repeat in late dormant period if rain is frequent. Bordeaux mixture 8-8-100 in early spring, repeat late fall after leaf drop.

POWDERY MILDEW: For control on peaches, apricots, and plums use Benlate 50W .75-1.5 lbs/100 gals. water applied at shuck-split and again at first cover. Or use Karathane LC 4 oz. to 100 gal. water applying full coverage spray at pink bud, petal fall, shuck-split and early covers. No application within 45 days of harvest. Use wettable sulfur in later applications. Karathane not cleared on plums.

POST-HARVEST FRUIT ROTS: Use Benlate 50W 8 oz. per 100 gals. water, apply as a dip or spray, thoroughly wet fruit as soon as possible after harvest. Treatment will not control species of Alternaria or Rhizopus.

HOMEOWNER RECOMMENDATIONS: For fruit pest controls, see OSU Current Report "1979 Home Fruit and Ornamental Pest Control".

For detailed information on using pesticides safely, see OSU Extension Facts No. 7450, Pesticides Can Be Used Safely.

USE ALL PESTICIDES SAFELY - READ AND FOLLOW MANUFACTURER'S INSTRUCTIONS

Any pesticide information presented is current with EPA regulations at the time of printing. The user is responsible for determining that the intended use is not inconsistent with the pesticide label.

If you do not fully understand directions on the label, ask your OSU County Extension Director or the appropriate OSU Area Extension Specialist, or contact the appropriate OSU Extension Specialist at Stillwater to assist you in a correct interpretation.

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