

UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

Extension Division

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PEACH AND PLUM SPRAY SCHEDULE

For effective control of curculio, sprays should be supplemented by jarring the adult curculio from the trees, both as a means of control and as an indication of when and where to spray, and by picking up and destroying dropped fruit.

Jarring for the Curculio. This should be done frequently during the 3 or 4 week period following petal fall. Spread a full-size bed sheet under a peach tree or limb and strike the trunk or limb 2 or 3 moderately sharp blows with a padded mallet. Destroy the curculios that fall on the sheet. They are small, grayish-black snout beetles with rough humps and white spots on the wings.

Jarring is most effective between daylight and 9 A. M. Start jarring on the edge of the orchard near the hibernation quarters of the adult curculios, and at intervals thruout the orchard. Jarring may be used as an indication of when and where to spray, if trees scattered thruout the orchard are jarred several times each week.

Curculio usually appear in large numbers on plum trees before they do on peach trees. They should be jarred from plum trees and destroyed more thoroly and frequently than from peach trees. Plum trees may serve as a trap if jarring is done regularly. Wild plum and neglected plum trees should be destroyed in peach-growing areas.

Kill the adults in hibernation. The beetles hibernate in grass, weeds, and debris in old fence rows, around shrubbery and plum thickets, in the edge of woodlands and similar situations. Cleaning up or burning such areas will kill many of the insects.

SPRAY SCHEDULE

TIME	SPRAY MIXTURE	FOR
Dormant season before buds swell. (Do not omit this spray.)	Tank-mixed oil bordeaux (see page 4) or either 12½ gals. liquid lime-sulfur or 30 lbs. dry lime-sulfur to 100 gals. water.	Scale. Leaf curl
Shuck-fall spray; 75 percent shucks off or when curculio first appear.	Lead arsenate 3 lbs. Hydrated lime 3 lbs. Zinc sulfate 1 lb. Water 100 gallons	Curculio (omit if no curculio present, or spray in spots for scattered infestations).
*Month after petal fall or 10 days after shuck fall. This spray should not be postponed.	Lead arsenate 3 lbs. Hydrated lime 3 lbs. Zinc sulfate 1 lb. Wettable sulfur 6 lbs. Water 100 gallons	Scab. Curculio (if jarring shows no curculio, use only wettable sulfur).
Ten days to 2 weeks later if jarring indicates the need.	Lead arsenate 3 lbs. Hydrated lime 3 lbs. Zinc sulfate 1 lb. Water 100 gallons	Curculio (use where jarring results indicate).
*3 weeks before harvest.	Wettable sulfur 6 lbs. Water 100 gallons	Brown rot.
*Just before harvest.	Wettable sulfur 6 lbs. Water 100 gallons	Brown rot.

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NOTES. Starred (*) sprays may be used as a fixed schedule where jarring is not practiced. Use pure "chemical" hydrated lime. Zinc sulfate should be included when lead arsenate is used. Run a few gallons of water into the tank, add the zinc sulfate and continue filling the tank while adding the lime, previously made into a paste, thru the strainer. Add the wettable sulfur, if required, and when the tank is nearly full, add the lead arsenate. Wettable sulfur is sold in Kentucky under various trade names.

CAUTION. Lime-sulfur and bordeaux mixture should not be used as a summer spray for peaches. Apply lead arsenate only when the trees and foliage are dry and do not apply sprays when the temperature is above 90 degrees F. Otherwise, there is danger of burning.

Oriental peach moth. Oil dusts give fairly satisfactory control when applied 3 or 4 times, at 5-day intervals, beginning about 20 days before harvest. Commercial dust may be used or a dust can be prepared in a regular dust-mixing machine. Dusts prepared by merely stirring or by mixing in the duster are unsatisfactory. Oil dust should contain 35 pounds of sulfur, 12½ pounds of hydrated lime and 2½ pounds of spray oil.

Fruits that drop because of curculio injury should be picked up twice a week and destroyed. Curculios cause drops during 2 periods; the first drop results from punctures made by overwintered beetles. The stung fruits usually grow to ½ inch or more in diameter and have a bead of gum over the injury. Most of them fall soon after the "June drop." The second drop is caused by second generation curculio worms which cause the fruit to ripen prematurely and fall just before harvest. Stung peaches that do not drop should be picked off while thinning. The curculio grub may be killed by submerging the drops in water for several days. Picking up and destroying the first drops is important, and if thoroly done assures nearly a worm-free crop. As brown rot follows curculio stings, this is an important means of controlling that disease. Destruction of wormy fruit just before and during harvest reduces the

Brown rot.

6 lbs.
100 gallonsWettable sulfur
Water

*Just before harvest.

number of beetles that hibernate. Their destruction is important in protecting the crop of the following year.

TANK-MIXED OIL BORDEAUX

USE LUBRICATING OIL, viscosity 125 to 200 seconds, Saybolt, at 100° F.; volatility less than 2 percent. This oil is sold at bulk stations under such names as "agricultural spray oil," "orchard spray oil," "scale oil," at about 20 cents a gallon.

For Hand Pumps

Oil	1 gal.
Calcium caseinate	5 ozs.
Hydrated lime	3 lbs.
Bluestone	3 lbs.
Water to make	50 gals.

For Power Pumps

Oil	2 gals.
Calcium caseinate	6 ozs.
Hydrated lime	6 lbs.
Bluestone	6 lbs.
Water to make	100 gals.

1. Mix the calcium caseinate in a bucket with $\frac{1}{2}$ pint of water, making a thick paste. Gradually dilute until the bucket is full. This step is important.

2. Put calcium caseinate mixture into spray tank and add just enough water to operate the pump.

3. Start pumping and allow discharge from the open spray rod to flow back into tank under full pressure.

4. Add the oil, continuing agitation, and pump for a few minutes; then fill the tank two-thirds full with water and while pumping add the hydrated lime, previously mixed in a bucket of water. Then add the bluestone previously dissolved in a separate bucket of water. Fill tank with water. Apply spray immediately.

Power spray pumps are more satisfactory than hand-pumps for making tank-mixed oil bordeaux. The procedure is the same but less calcium caseinate is needed.