

AGRICULTURAL EXPERIMENT STATION  
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SUGGESTED SUBSTITUTES FOR THE POISONED BAIT  
SPRAY FOR CHERRY FRUIT FLY CONTROL

by

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Due to recent war emergency rulings it will be very difficult or impossible to obtain molasses, which is used in the cherry fruit fly bait spray for the control of the cherry fruit fly.

The following materials are suggested as substitutes for the poisoned bait spray:

Lead arsenate.....  $2\frac{1}{2}$  pounds  
Water to make..... 100 gallons  
Add to this material one of the commercial spreaders  
or a home-made spreader consisting of skimmed milk  
2 quarts and hydrated lime 4 ounces. If cherry leaf  
spot is a problem on sour cherries add lime sulfur  
2 gallons in the first spray and wettable sulfur 6  
pounds in the second or third spray.

or

If a dust is preferred it is suggested that a 90-10  
lime-lead arsenate or 90-10 sulfur-lead arsenate dust  
be used for cherry fruit fly control.

Time of Application:

Two properly timed cover sprays or dusts should suffice to control the fly on all varieties of cherries, unless heavy rains occur during the spraying season. The sprays or dusts, however, must be thorough, covering all parts of the trees. The first application should be made when the first flies appear in the field. This usually occurs in the last week in May or the first week in June when Royal Ann cherries show only a slight trace of color. The exact time of emergence may be determined by "emergence cages." Since the flies begin to lay eggs soon after emergence from the soil, there should be no delay in applying the first spray or dust. A second spray or dust should be applied at the peak of fly emergence or two weeks after the first application. If a third application is necessary it should be applied two weeks after the second. Growers may obtain timely spray information through their County Agent.

### Thoroughness of Application:

It should be understood that this is not a bait spray. The trees should be given a complete cover spray or a thorough dusting. Inter-planted foliage and fence rows should be treated in the same manner as the cherries. Dust applications should be repeated after rains. It may be necessary to repeat the sprays after continuous rains.

### Spray Residue Complications:

It may be advisable for those growers who market their fruit locally for fresh fruit consumption to either wash their fruit or use a substitute for lead arsenate.

### Rotenone As a Control for Cherry Fruit Fly:

Three years of field tests by the Oregon Experiment Station have indicated that rotenone sprays or dusts will control the fly if applied properly. If a spray is used 4% rotenone spray powder should be used at the rate of 3 pounds to 100 gallons of spray. The rotenone dust should contain 3/4% rotenone using diatomaceous earth, talc or sulfur as a diluent.

Two thorough applications beginning when the fly first appears in the field and repeated seven days later should suffice on Royal Ann cherries or other varieties which will be barreled in brine. Bings, Lamberts or other late ripening varieties should be sprayed at weekly intervals with rotenone until one week before harvest.

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