

AGRICULTURAL EXPERIMENT STATION  
Oregon State College  
Wm. A. Schoenfeld, Director  
Corvallis

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Questions and Answers About the Cherry Fruit Fly  
by  
S. C. Jones  
Assistant Entomologist

Many questions about the cherry fruit fly have been asked by cherry growers. The information requested by the growers is presented in this circular letter as answers to the questions asked.

Life History

1. Q. How does the cherry fruit fly spend the winter?  
A. The cherry fruit fly spends the winter as a puparium. The puparium is found under the infested cherry trees buried from two to three inches in the ground.
2. Q. When does this pest emerge as a fly from the soil?  
A. The fly emerges from the soil usually during the first week in June. The time of emergence will depend on climatic factors.
3. Q. How long are the flies on the trees before egg laying begins?  
A. The flies spend from 7 to 10 days on the foliage of cherry or other trees before they begin laying eggs.
4. Q. Where are the eggs laid?  
A. The eggs are laid under the skin of the cherry.
5. Q. How long does it take for the eggs to hatch?  
A. The eggs hatch in from five to seven days.
6. Q. When does the maggot or larva become mature?  
A. The maggot becomes mature in about 14 days.
7. Q. Where does the maggot go after reaching maturity?  
A. The maggot drops to the ground and works its way into the ground where it remains as a puparium until June of the next year.
8. Q. How long do the flies continue to emerge?  
A. Flies may continue to emerge over a period of 5 to 6 weeks.
9. Q. How many years will the cherry fruit fly live in the soil before emerging as flies?  
A. Most flies emerge in one year but a few will live in the soil from two to three years.

Control

1. Q. When should the first spray be made against this pest?  
A. The first spray should be put on as soon as the first fly emerges from the soil.
2. Q. Is more than one spray necessary?  
A. Three sprays will be recommended this year. The second spray should be applied 7 days after the first. The timing of the third spray will depend upon the emergence of the fly.
3. Q. What kind of a sprayer should one use against this pest?  
A. Either a power or hand sprayer can be used. Apply the solution as fairly fine droplets on the upper surfaces of the foliage on all sides of the tree. The spray should be a thorough bait spray. The amount of material recommended per tree will depend upon its size.
4. Q. Is it necessary to drench a tree to control this pest?  
A. No. The trees, however, should be well covered by directing the spray over the trees and permitting the liquid to fall on the upper surfaces of the foliage. The spray should reach every part of the tree.
5. Q. Should a spray be repeated after a heavy shower?  
A. Yes.
6. Q. Should interplanted trees be sprayed?  
A. All trees regardless of kind should be sprayed if they are interplanted with cherries. Brush along fence rows adjacent to cherry orchards should also be sprayed.
7. Q. Should Royal Ann and varieties of sour cherries be sprayed as other varieties of cherries?  
A. Yes. Even though Royal Anns may escape infestation due to the early harvest, the trees may harbor flies which will infest cherries later on. Sour cherries are very susceptible to infestation and special attention should be given them.
8. Q. Can a sprayer be used that has previously contained lime sulfur?  
A. Yes. Precautions should be taken, however, to thoroughly wash spray tank before using.
9. Q. Can lime sulfur and lead arsenate be combined as a cherry fruit fly and brown rot spray?  
A. This combination is used in the Eastern states, but it cannot be recommended for general use in Oregon until further experimentation is possible under Oregon conditions.
10. Q. Can this pest be controlled by cultural practices such as cultivation?  
By parasites or by predators?  
A. Cultivation, parasites and predators help to reduce the number of flies but such practice cannot be relied upon for complete control.
11. Q. What is the formula for the preparation of the poison bait spray?  
A. Lead arsenate ----- 1/2 pound  
Molasses ----- 2 quarts  
Water ----- 10 gallons  
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