

OREGON AGRICULTURAL COLLEGE

EXPERIMENT STATION

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THE GOOSEBERRY AND CURRANT FRUIT FLY.

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The gooseberry maggot or fruit fly is one of the most serious pests of the currant and gooseberry fruits that the grower has to contend with. The damage wrought by this pest is caused by the feeding of the larvae within the fruit itself, causing it to become prematurely ripened and entirely worthless. The first indication of injury due to this insect is a small spot on one side of the fruit. Later the fruit shows a cloudy appearance, becomes prematurely ripe, and upon examination reveals a dark spot in the interior, which proves, when the fruit is opened, to be a small legless maggot.

The adult of this maggot is a rather small attractive lemon-yellow fly about the size of the house fly. The wings are marked with smoky bands. The fly emerges during April and May from the soil where it has spent the Winter. The exact date varies with the season. Last season the first flies were observed April 10 resting on the gooseberry bushes ready to lay their eggs in the fruit as soon as it was formed. In 1926, they were first observed on April 8, and in 1925 on May 15.

They fly about on the foliage for a few days, lapping up moisture and bits of honey dew from the surface of the leaves. After a short time, they commence stinging the berries, laying their eggs under the skin of the fruit.

Control Measures Recommended

The fact that the maggots hatch out underneath the skin of the fruit precludes any possibility of reaching the worms with a spray. The attack, therefore, must be directed against the adult fly and against the resting stage in the soil.

A sweetened poison spray consisting of lead arsenate (2 ounces), syrup (1 quart) and water (3 gallons) is attractive to the flies and will kill them when sprayed lightly on the foliage during the time that the flies are out.

The first spray application should be made as soon as the berries set. Others will follow until the middle of May or later. Additional spray applications should be made at weekly intervals in case no showers of rain occur, until five or six have been made. Rain will largely discount the effect of previous applications and will necessitate a repetition of the spray.

In applying the spray, care should be exercised to use no more material on the bush than is necessary. There is no object gained by spraying the fruit itself and heavy applications of spray apparently do no more good in maggot control than light applications. The solution is applied as a fine spray, letting it fall as minute globules on the leaf surface. The foliage of adjacent shrubs and bushes is also sprayed.

A 3-gallon tank of spray will cover several acres, the whole operation requiring a comparatively brief time. This operation compares in no way with the labor and expense involved in applying a regular lime sulfur or bordeaux spray. Expensive spraying equipment is not essential. A 3-gallon compressed air sprayer will be adequate for five acres or more.

For nearly eleven months of the year this insect occurs in a helpless state in the first few inches of surface soil beneath the plants. Frequent stirring of the surface soil under and immediately adjacent to the bushes during the late Summer, Fall and early Spring will expose many of these pupae to adverse weather conditions, to attacks by birds, chickens, turkeys and the like. In tests at the Oregon Experiment Station better cultural practices alone, i.e., closer and more frequent cultivation, apparently reduced the infestation to a negligible factor.

Growers desiring additional information upon the gooseberry fruit worm or other insect pests attacking gooseberries and currants should write the Oregon Agricultural College Experiment Station for Circular 42 - Insects Pests and Diseases of Currants and Gooseberries.