SPRAYING FOR THE CONTROL OF
THE FILBERT FORM AND FILBERT BLIGHT IN OREGON

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FILBERT BLIGHT

Bacterial blight, commonly known as filbert blight, is the most widely distributed and destructive disease of filberts in Oregon. The prevalence and destructiveness of bacterial blight varies with the season and the age of the trees, severe damage being caused in seasons especially favorable for its development. The most severe losses therefrom occur in young orchards two to four years old, where the disease frequently causes the death of trees. Although trees more than four years of age seldom die from bacterial blight infection, many buds and nut-bearing twigs in the tops of older trees are attacked and killed, thus reducing the yield. The average annual crop loss from blight has varied from 1 percent to 10 percent in the past decade. In certain orchards, the loss has reached 25 percent.

Control

Investigations carried on over a period of ten years show that the incidence of bud and twig blight due to this disease can be materially reduced by timely spraying with bordeaux mixture.

One spray application of bordeaux mixture 6-2-100 (6 pounds of copper sulphate, 2 pounds of quick (caustic) lime or 3 pounds of hydrated lime, 100 gallons of water) made in late summer (July or August) will hold the disease in check in a normal western Oregon season. A good wetting and sticking agent should be added to the spray mixture to facilitate the wetting of the host parts and adherence of the spray residues thereto.¹

¹ For further information concerning wetting and sticking agents consult your county agricultural agent or the Oregon Agricultural Experiment Station.
THE FILBERT WORM

The filbert worm has become a serious pest in many Oregon filbert orchards. The worms hatch from eggs laid by the adult moths mostly on the uppersides of the leaves. The newly hatched worms move about in search of filberts, feeding, especially on the underside of the leaves, as they do so.

Control

The recommended control for this pest consists of a spray application of 3 pounds of lead arsenate in 100 gallons of water plus a good wetting agent.

The spray should be applied after the moths begin to lay eggs, but before any hatch. In a normal season the first moths emerge after pupation in the ground during the forepart of July and continue to do so for a month or more thereafter. The eggs hatch in approximately 8 days after they are laid, which allows the grower about a week after receipt of spray notice in which to spray the orchard. While one spray application has, in the past, given good control, a second application may be necessary, depending on the seasonal development of the insect. For spray timing information consult your county agricultural agent who will be kept informed by the Department of Entomology at Oregon State College.

THOROUGHNESS OF APPLICATION ESSENTIAL

Both the filbert worm and the filbert blight sprays should be thoroughly applied in addition to being properly timed. A film of spray must uniformly coat the leaves (especially the undersides), buds, and nuts if satisfactory control is to be obtained.

COMBINATION SPRAY PROGRAM FOR FILBERT BLIGHT AND FILBERT WORM CONTROL

The results of experiments carried on over a period of three years indicate that the filbert worm and filbert blight control programs can be combined and both pests controlled with one application of a combination spray consisting of bordeaux mixture 6-2-100 (6 pounds of copper sulphate, 2 pounds of quick (caustic) lime or 3 pounds of hydrated lime, 100 gallons of water) plus lead arsenate 3 pounds in 100 gallons of spray plus an efficient compatible spreader-sticker. In preparing this combination spray, the bordeaux mixture should always be made up first, then lead arsenate and the spreader added in the order named.

1/ For further information concerning wetting and sticking agents consult your county agricultural agent or the Oregon Agricultural Experiment Station.
### SUMMARY OF THE SPRAY PROGRAMS

For

**FILBERT BLIGHT AND FILBERT WORM CONTROL**

<table>
<thead>
<tr>
<th>Pest</th>
<th>Spray materials and strength</th>
<th>When to apply</th>
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<tbody>
<tr>
<td>Blight control only</td>
<td>Bordeaux mixture 6-2-100 plus spreader-sticker</td>
<td>Late summer, before first fall rains</td>
</tr>
<tr>
<td>Worm control only</td>
<td>Lead arsenate 3 pounds in 100 gallons of water plus spreader</td>
<td>When first eggs are laid. Consult Entomology Department, Oregon Agr. Exp. Sta., or county agent for exact time.</td>
</tr>
<tr>
<td>Blight and worm control combined</td>
<td>Bordeaux mixture 6-2-100 plus lead arsenate 3 pounds in 100 gallons plus a spreader-sticker</td>
<td>When first eggs are laid. Consult Entomology Department, Oregon Agr. Exp. Sta., or county agent for exact time.</td>
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