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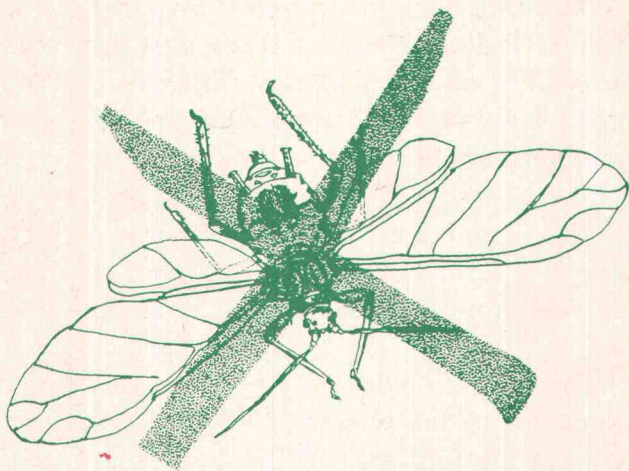
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Control

Strawberry Aphids



to Stop Spread of
Virus Diseases

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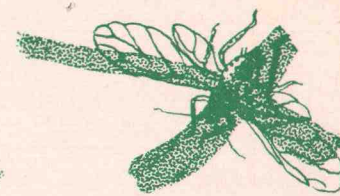
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Extension Circular 585

March 1955



Strawberry Aphids Spread Virus Diseases



VIRUS DISEASES in Oregon strawberry plantings reduce yields and shorten the productive life of the plantings. The diseases are spread from one plant to another only by the strawberry aphid.

There are two forms of the strawberry aphid—winged and wingless. Winged aphids carry the disease from one field to another; wingless from one plant to another within a field.

The small, pale green, wingless, adult aphids spend the winter in the leaf buds and between the folds of small leaves. In the early spring they begin reproduction by giving birth to living young, some of which develop wings. Winged aphids are found in greatest numbers during mid-May and June and again in September and early October. These are the most important times for killing aphids.

Steps in Virus Disease Control

- ▶ Plant only certified plants.
- ▶ Control aphids by dusting.
- ▶ Inspect new plantings and destroy abnormal plants. To avoid scattering aphids, rogue after dusting.

Use These Insecticides

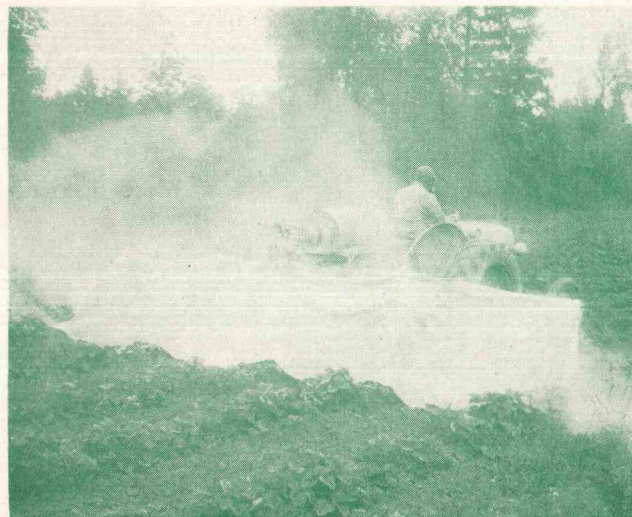
- ▶ 1% parathion dust or
- ▶ 4% or 5% malathion dust or
- ▶ 1% lindane dust.

Parathion is effective and the least expensive, but is most hazardous. Malathion is ef-

fective, more expensive, but relatively safe. Lindane is less^{effective, more} expensive than parathion, but safe to use. It is suggested that growers in suburban areas where dust drift might be objectionable use either malathion or lindane. Growers who have large acreages may prefer the less expensive parathion.

Suggested Rates of Application

- ▶ Mature fields
Use 40 pounds of dust per acre, per application. More may be needed if the foliage is dense.
- ▶ New plantings
Use 10 to 20 pounds of dust per acre, per application. The fall application may require 40 pounds per acre for good coverage.



A canvas drag on the duster gives better coverage.

If you use a sprayer, apply 1/2 pound of parathion or 1 1/2 pounds malathion per acre per treatment.

Equipment

The dusting must be thorough for the best results. Use a light canvas drag behind the duster to do the job more thoroughly. Hand dusting and airplane dusting are not recommended. Spraying has not been as effective as dusting, but if you don't have a duster, it is better to use a sprayer than to leave the job undone. Efficient sprayers have more than one nozzle per row.

Timing Is Important

The reason for killing aphids is to protect the plantings from virus spread. The new fields must be dusted throughout the season to kill aphids that move in. Aphids on bearing fields should be killed to prevent them from flying into the new fields.

Timing the dust applications is important. The critical periods are during May and June and again in September and early October. Dust both old and new plantings of all varieties in the spring just before Marshall strawberries bloom and again in 2 weeks. On new plantings, continue dusting at 2-week intervals until the middle of July. Dust both old and new plantings in late September or early October. If warm weather continues late in the fall it may be advisable to dust again.

Avoid Residues on Fruit

Do not apply parathion within 2 weeks of harvest, malathion within 10 days of harvest, or lindane after the fruit has set. If treatments are needed nearer to the picking date or between pickings, use a 1 per cent TEPP dust—but not within 2 days of harvest.

Extra Dividends

Growers who follow the aphid control program will receive these additional benefits.

- ▶ The first parathion or malathion application will give satisfactory control of spittlebugs if the infestation is not unusually heavy.
- ▶ The first two applications of parathion or malathion will control the strawberry fruit worm, or omnivorous leaf tier.
- ▶ The later applications of parathion or malathion will control the strawberry leafroller.
- ▶ The later applications of parathion or malathion will aid in the control of strawberry root weevils.

Caution

Parathion and TEPP are very toxic. Use a respirator designed to protect against these materials. Avoid getting the materials on the skin. Avoid drift and improve the control by dusting in the early morning when there is no wind. Follow the recommendations on the container.

*See your local
County Extension Agent
for further information
on insect pests and
plant diseases.*