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How to Recognize and Control Peach Leaf Curl
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How to recognize and control

Peach Leaf Curl



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Peach Leaf Curl

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Importance

Peach leaf curl causes serious damage on unsprayed trees in about 3 out of 5 years under Michigan conditions. On infected trees the peach leaf curl fungus destroys the early leaves. The ensuing growth of new leaves lowers established food reserves, weakens the tree and reduces the crop. These trees are more likely to be hit by winter injury. Repeated attacks can result in death of the trees.

Severe leaf-curl years **cannot** be predicted.

Life Cycle

The disease fungus, *Taphina deformans*, is always present on the waxy coating of the peach twigs. It lives there harmlessly most of the year as single-celled yeastlike spores or plants. These cells multiply by division and spread by winds or air currents. In the spring, when the buds start to swell, the spores germinate and infect emerging leaves.

Infected leaves also produce spores which may increase the fungus, but these spores do not play an important role in increasing disease in the same season.

Conditions Favoring Leaf Curl Fungus

Only young, tender tissue can be infected. Cold, slow growing conditions that hold back leaf development plus a few wet periods are necessary for leaf infection. These conditions are common in the Great Lakes region.

Disease Symptoms

Leaves: Infected leaves become curled, puckered, and swollen. The color of the thickened parts varies from light green to red. Early in the summer the swollen, infected leaves soon turn yellow, wither, and fall to the ground. (See Fig. 1).



Fig. 1. Leaf symptoms of peach leaf curl. Notice the curling and puckering.

Shoots: Young shoots infected with this fungus are short, swollen, and pale yellow or green. Shoot infection is rather rare.

Fruit: Fruit infection is rare but can be recognized as slightly raised, roughened, red to scarlet areas without fuzz.

Peach Leaf Curl Control

This disease is effectively controlled with **one** spray, but this spray must be applied before infection occurs. If leaf curl appears, sprays are of no value for that season.

The following factors are essential for control:

Thoroughness

The sprays kill the spores on all tree parts so that they are not present when growth starts in the spring. A good coverage of twigs, branches, and trunks is essential.

Timing

Failure may result if timing is late. To be certain of control, spray BEFORE buds swell in the spring. Fall spraying AFTER leaf drop is also effective.

Materials

All listed materials at recommended strengths give good control. Growers have a choice of materials which will vary in cost, convenience, and availability.

Use any of the following materials in 100 gallons of water:

For **fall** spraying: Bordeaux 6-6-100* or 1½ pounds Ferbam.

For **spring** spraying: Bordeaux 6-6-100* or 1½ pounds Ferbam or 5 gallons liquid lime sulfur.

Home orchard: Two tablespoonsful of Ferbam per gallon of water in the fall or spring.

Fertilizer

Effects of the disease may weaken peach trees. To strengthen them and to promote new growth, apply a nitrogen fertilizer to severely infected trees before June 15. The amount of fertilizer will depend on the tree size and vigor. Late fertilizer applications may prolong growth into late fall, making the tree susceptible to cold injury.

To prevent peach leaf curl . . .

- Plan a leaf curl spray each year.
- Spray on time.
- Spray thoroughly.

**Bordeaux 6-6-100 means 6 pounds of copper sulfate and 6 pounds of spray lime in 100 gallons of water.*

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