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Peach Leaf Curl

Paul C. Pecknold, Extension Plant Pathologist

Peach leaf curl is one of the most common and widespread diseases affecting peach plantings in the United States. Recognized as a common peach trouble since 1821, it occurs in almost every region where peaches are grown. It has been known by names such as, curly leaf, curly blight and leaf blister.

Although peach leaf curl is primarily a foliage disease, it also may affect blossoms, young twigs and fruit. The disease causes loss of foliage early in the summer. This stimulates the affected tree to produce another crop of leaves, resulting in decreased tree vigor. Lowered tree vigor usually increases the danger of winter injury.

Symptoms: Peach leaf curl is first noticed early in the spring when leaves start to unfold. Diseased leaves are noticeably red and soon become distorted, thickened and greatly curled as they develop. When diseased leaves are fully developed, they are lighter colored than normal, frequently flushed with red, and greatly curled, puckered and distorted (Figure 1).

Leaves infected with leaf curl are also thicker than normal leaves and have a firm and leathery consistency. The entire leaf or

Figure 1. Leaf symptoms of peach leaf curl. Notice the curling and puckering.
any portion of it may become infected. A few
or nearly all of the leaves on a tree may fall,
depending upon the severity of the attack. As
the growing season advances, the upper surface
of diseased leaves turns gray and develops a
powdery appearance. Dry weather soon
withers the leaves causing them to fall early.
However, cool weather delays defoliation.

Young infected peach fruits become dis-
torted and seldom remain on the tree very
long. Infected fruits show irregular, swollen,
colored areas on their surfaces. These areas
are usually wrinkled, without the normal
peach fuzz, and look like they have been
polished.

Cause: Peach leaf curl is caused by the fun-
gus *Taphrina deformans*. Spores of the fun-
gus are produced on the surface of diseased
leaves in midsummer and give the leaf the
powdery appearance previously described.
These spores are spread to all parts of the
tree by winds and rains, becoming lodged
under bud scales and rough bark, and here
they remain throughout the summer and win-
ter months. In the spring, when the young
peach buds begin to swell, germinating
spores of the fungus penetrate the young
leaves, causing leaf curl infection.

Control: Peach leaf curl can be prevented by
a single spray application made in late fall,
after leaf drop, or in early spring, BEFORE
bud swell. One of the following materials
may be used; be sure to follow all label in-
structions.

A. Bordeaux mixture

Most commercial peach growers prefer to
combine leaf curl control with the measures
recommended for the prevention of scale in-
sects. For this reason, a 6-6-100 Bordeaux
mixture (6 pounds of copper sulphate, 6
pounds of spray lime in 100 gallons of water)
combined with 3 gallons of dormant oil should
be applied when the trees are strictly dormant.
This practice will eliminate both the leaf curl
fungus and scale insects.

When scale is not a problem, a dormant
spray of 6-6-100 Bordeaux mixture combined
with 2 quarts of dormant oil may be used.
The addition of this small amount of dormant
oil to the Bordeaux mixture acts as a spreader
resulting in better coverage and more effec-
tive control.

Home fruit growers should substitute
ready-prepared Bordeaux mixture, used at
dormant strength, in place of the above.

B. Lime-sulfur

Liquid lime-sulfur, applied as a dormant
spray, may be substituted for 6-6-100 Bordeaux
mixture. It should be used at a strength of 5
gallons per 100 gallons of water. (This is the
equivalent of 3/4 cupful in 1 gallon of water.)
Use in spring only.

C. Ferbam

Ferbam may be substituted for the above
materials at the rate of 2 pounds per 100
gallons (2 tablespoons per gallon of water)
applied in the spring BEFORE buds swell.