

**1449   
Oak leaf blister**

Oak leaf blister is caused by the fungus *Taphrina caerulescens*. Although all oaks are susceptible, red and black oaks are the most susceptible. White oaks are rarely infected.[[](http://www.ext.colostate.edu/ptlk/1449a.html)](http://www.ext.colostate.edu/ptlk/1449a.html)

Symptoms appear in early summer as yellow, blister-like, circular, raised areas, one-sixteenth to one-half inch in diameter. The blisters are scattered overthe top of the leaf with corresponding gray depressions on the lower surface. They turn from yellow to reddish brown with pale yellow margins, then become dull brown with age. Several blisters may merge and cause leaf curling. . This disease also may cause oaks to  drop their leaves prematurely in the early fall. The fungus survives on bud scales and in bark crevices.

Blisters form when infected cells are stimulated to grow, while surrounding, uninfected cells remain rigid. Leaves that expand are not susceptible to infection. Blisters usually are less than one inch in diameter, and the lower surface is gray as the fungus develops in the leaf tissue. This disease may go [[](http://www.ext.colostate.edu/ptlk/1449b.html)](http://www.ext.colostate.edu/ptlk/1449b.html)unnoticed until a large number of leaves are severely infected or begin to fall.

Leaf blister is favored by mild, moist conditions during early leaf growth, and may result in 50 to 85 percent defoliation of affected trees by mid-summer. Defoliation can reduce growth and, if repeated over a period of years, may weaken the tree so that it is susceptible to attack by other organisms.

Chemically controlling leaf blister is usually not warranted or economically justified. The fungus will not harm the long term vigor of the tree. However, the disease may be unsightly and cause much anguish to homeowners. Particularly valuable trees may warrant treatment with fungicide, which must be applied as dormant spray to be effective. Fungicides are not effective after leaves begin to develop because the infection has already occurred. Maintaining healthy trees by properly watering, pruning and controlling insects reduces the effect of this disease.