

Oak Anthracnose is a disease affecting oak trees caused by the fungus *Apiognomonia quercina*. The disease affects leaves and shoots of oak trees. It may appear serious, but it is not life threatening and does not cause permanent damage. The fungus overwinters on infected twigs and fallen leaves and is activated in the spring by cool and wet weather.

Host and Damage

All species of oaks are affected. Trees from the White oak group (*white oak*, *bur oak*, *English oak*) are most susceptible.

Infection of young leaves results in brown, dead, and deformed margins of leaf tissue as well as irregularly shaped spots. Heavily infected leaves appear misshapen and curled. Older leaves are more resistant to infection and small, brown spots may develop on them.

Twigs infected during the growing season often die before the buds are able to open. Anthracnose commonly develops on trees already infested by the *golden oak scale*, resulting in more dieback than would be caused by the fungus alone.

Severe infections may result in the loss of leaves in spring, however the trees usually produce a new flush of leaves in summer.

Infection is usually heaviest on the lower portion of the tree, where relative humidity is higher and leaves remain wet longer.



Deformed young leaves with anthracnose



Brown spots on older oak leaves with anthracnose

Specific Management Practices for Control of the Oak Anthracnose:

- Raking leaves in the fall and pruning dead or dying branches helps reduce infection the following year. Leaves may be composted by City composting programs.
- When watering, avoid wetting the crown of the tree.

General Management Practices to Improve Tree Health:

- Water your trees during dry spells. Infrequent, but deep soaking preferably during the early morning hours is recommended. Water absorbing roots are located in the upper 25 cm of the soil and extend outward well beyond the canopy dripline.
- Place organic mulch, (e.g. wood chips), or living mulch, (e.g. ground cover plants) around tree bases to keep the soil moist for longer periods and encourage healthier roots.
- Avoid unnecessary excavating, grade changes, soil compaction, root cutting or hard surfacing around trees. These activities destroy vital roots, which may lead to the decline or death of trees.
- Refrain from using salt or herbicides around trees.

Forest Health Care is a holistic approach to tree care that focuses on improving the health of trees in an urban environment. Our objective is a healthy, sustainable urban forest. Trees in urban forests are often stressed by compacted soil, drought, poor planting and pruning techniques, air pollution, road salt, damage from construction and much more. Trees planted in the right sites and properly maintained are less likely to suffer and are more resistant to pest problems.

Pest problems are managed using a decision making process that considers the following:

- Identification of the host and the pest.
- Monitoring of the host and the pest.
- Selection of the appropriate management strategy.
- Evaluation of the management plan.

Our focus is on pest management programs that are environmentally, socially and economically sound.