



Parks, Forestry & Recreation

Urban Forestry Branch

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Forest Health Care

Ash Anthracnose

Ash anthracnose is a common disease of ash trees, caused by the fungus *Apiognomonia errabunda*. The fungus over-winters in infected twigs and fallen leaves. Infection on newly emerged leaves and shoots begins in early spring during cool and wet weather. Although it can cause complete leaf loss in the spring, trees usually recover by producing new leaves. The disease does not cause permanent damage to the tree, however repeated leaf loss year after year can weaken trees and predispose them to other pest problems or environmental stresses.

Host and Damage

Hosts include black, green, red, and white ash. Green ash is relatively resistant.

Shortly after infection, irregular water-soaked spots appear on young shoots and leaves. As the disease develops, leaflets show brown to black blotches or spots, usually from the margins toward the center. The leaves tend to curl. Infected leaves often drop prematurely. Older leaves are more resistant and may only appear spotted. The disease usually infects the lower portion of the canopy first and then spreads upward. A tree may lose a large part of its foliage, but produces a new flush of leaves later in the spring.



Brown necrotic spots on older leaves



Young leaves distorted by the fungus

Specific Management Practices for Control of the Ash Anthracnose:

- Removing leaves in the fall will help reduce the over-wintering population of anthracnose fungi. Leaves may be composted by City composting programs.
- Prune the tree to remove diseased twigs and branches.
- Avoid watering the canopy of the tree.

General Management Practices to Improve Plant 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 drip line.
- 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.