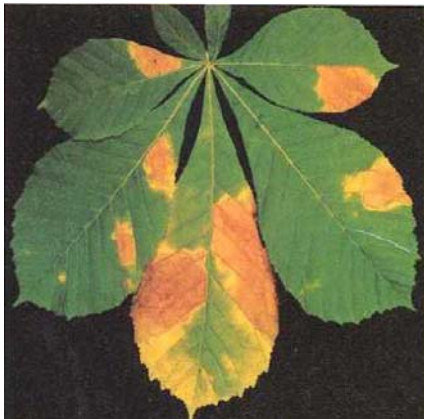
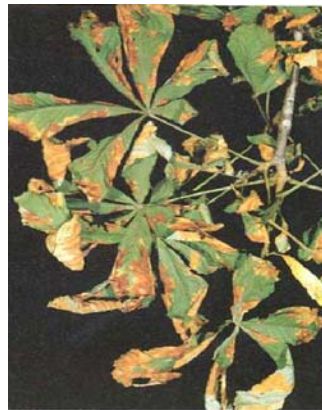


Leaf blotch of horse-chestnut is a leaf disease caused by the fungus *Guignardia aesculi*. It causes browning and curling of leaves of horse-chestnut and buckeye. The infection starts in early June and spreads throughout the summer in wet weather. The disease is not a serious health concern to trees.



*Reddish brown blotches on the leaf.*



*Browning and curling of leaves.*

## Hosts and Damage

Host trees are horse-chestnut and buckeye.

The fungus may cause severe damage on young trees and nursery stock. It usually does not affect the health and growth of older trees except when they are stressed by drought, root loss or other factors. For infection and spread the fungus requires wet weather conditions.

Symptoms first appear as water soaked areas on young leaves early in summer. These lesions enlarge and may join together to form large reddish brown blotches on fully developed leaves later in summer. Tiny black spots (fruiting bodies) are present in dead areas. The infected leaves become dry and drop prematurely. The fungus overwinters on fallen leaves. In the spring, during wet weather, fungal spores are released from overwintered leaves to start a new infection on young unfolding leaves in the tree.

## **Specific Management Practices for Control of the Leaf Blotch of Horse-Chestnut:**

- There is no effective control after the leaves are infected and the first symptoms appear. Prevention is the best method of control.
- Rake up and dispose of infected leaves in fall. This will reduce the source of infection the following spring. Leaves may be composted by City composting programs.
- Dense foliage preserves the moisture after rainfall creating favorable conditions for infection by the fungus. Crown thinning or selective pruning will improve air circulation and decrease humidity levels in a tree canopy.
- Avoid watering the leaves 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 dripline.
- Place organic mulch, (e.g. wood chips), or living mulch, (e.g. ground covers) around the tree base to keep the soil moist for longer periods and encourage healthier roots.
- Avoid any unnecessary excavating, grade changes, soil compaction, root cutting or hard resurfacing around trees as these activities destroy vital roots which may lead to tree decline or death.
- Refrain from using high levels of 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.