

# Sherdec Tree Service

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## Aphids on Shade Trees

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### Quick Facts about Aphids

- Aphids occur on almost all trees and shrubs
- Symptoms include curled leaves, sticky residues and plant discoloration.
- Always check for natural enemies of aphids before applying insecticides.
- Systemic insecticides are effective against aphids protected by curled leaves.
- Contact insecticides and insecticidal soaps are only effective against exposed aphids.

### Identification

Dozens of species of aphids ("plant lice") may be found on shade trees and woody ornamental plants in the area. Aphids are small insects; they are typically less than 1/8 inch long, although some aphids may reach almost 1/4 inch. Aphids may or may not have wings, depending upon the stage in their life cycle and their sex. A key feature of all aphids is that they have cornicles, tiny projections that look like a car's tailpipes. Aphids come in a wide variety of colors, from bright orange to green or gray to red. One common group, woolly aphids, produce an abundance of flossy, waxy threads that cover their bodies.

### Damage

Aphids feed on plants by sucking plant sap from the leaves, twigs or stems. When abundant, aphids remove large quantities of sap, reducing growth and vigor of the plant. This injury is most common with stem or trunk infesting aphids. Aphids can also cause leaves to curl. Most aphids also excrete large quantities of a sweet, sticky substance called honeydew. At times excessive honeydew dropping from trees can be an extreme nuisance. Sooty mold fungus may grow on the honeydew, producing a gray unattractive covering on the leaves. This mold is not

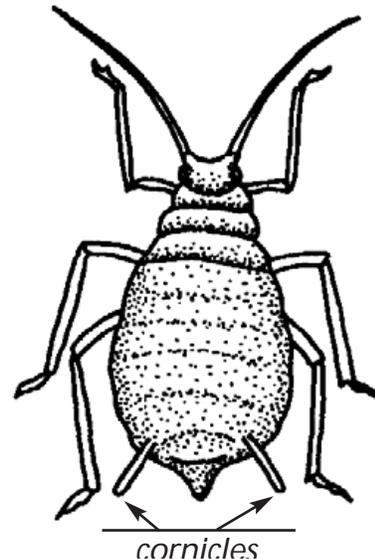
damaging except that it can temporarily reduce photosynthesis of the leaves.

### Ants and Aphids

Ants feed on aphid-produced honeydew. Ants even tend colonies of aphids and other honeydew-producing insects, acting almost like shepherds. Often the presence of ants crawling up trees or over foliage indicates that large numbers of aphids or other honeydew producing insects are feeding on the plant.

### Typical Aphid Life History

Most species of Ohio aphids over-winter as eggs on their specific woody plants. Eggs hatch in the spring and some winged aphids may move to other plant species. In the summer aphids can give birth to live young at a rate of 1 to 20 per day without mating; young aphids born without mating are all female. The newly hatched aphids can complete their development within one to two weeks, after cornicles which they begin to produce more aphids. Consequently, aphid populations can increase very rapidly. At the end of the summer male and female aphids mate on the host plant and the females lay eggs to over-winter.



## Control

Many kinds of insects naturally prey on aphids. Under normal conditions these beneficial insects will control the aphid populations. However in the urban landscape, this may not be the case and aphid populations can get very high. A good rule of thumb is that control is recommended only if aphid populations reach a level where there is damage to a plant. When using insecticides, it is extremely important to always read, understand, and follow the specified label rate. Systemic insecticides work well on aphids that are protected by curled leaves. Orthene (acephate) is a common systemic insecticide that is applied by spraying the plants. Merit (imidacloprid) is a systemic insecticide that is applied as a soil drench or injection. The plant takes up the insecticide via the root system and translocates it into the canopy. The aphids are controlled before significant damage occurs, when they begin feeding on the foliage. Contact insecticides and insecticidal soaps that do not move systemically in plants are useful for aphid control only when aphids are exposed on the plants. Contact insecticides include malathion and Sevin (carbaryl). Plants must be thoroughly covered with the insecticide when using contact insecticides to ensure effective control. Aphid problems originating from eggs that over-winter on the plant can also be controlled with dormant oils. Where high water pressure is available, infested plants may be hosed with water to physically remove aphids. This also removes recently deposited honeydew. After assessing your site and plant health your Sherdec Arborist can make specific recommendations regarding treatment for your important landscape plants.