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Honeysuckle leaffolding aphid

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Landscapers and nursery operators in Wisconsin long considered honeysuckle a low-maintenance plant. The arrival of honeysuckle leaffolding aphids in 1980 changed that. Although honeysuckle still thrives in many locations with few insect or disease problems, the severity of aphid damage has necessitated chemical controls to keep many honeysuckles healthy.

The aphid in question, *Hyadaphis tataricae*, is a native of eastern Europe where it causes considerable damage to cultivated honeysuckle. It was first detected in North America near Montreal, Canada, in the late 1970s. It overspread Wisconsin during the 1980s and now occurs throughout the Great Lakes region.

Symptoms and effects

The aphids feed in colonies on the tips of new growth, and there may be as many as several hundred aphids on a single terminal shoot. They feed by sucking the plant's juices, which stunts the growth of leaves and stems. Host shoots do not elongate normally, and small, weak side shoots proliferate. The leaves remain quite small.

Much of the aphid feeding is on the upper leaf surfaces, especially near the leaves' central veins. This feeding stimulates the leaves to fold upward along their central veins, enclosing the aphids within. These folded leaves undoubtedly protect the aphids from environmental adversities, and possibly from contact insecticides, too.

If feeding on stems begins early in the season, these stems will grow very little. Stems that do not become infested until later in the season have some healthy growth, but the infested growing tips show the typical symptoms.

As the season progresses, the stunted, distorted growth of infested stems becomes denser and more compact, taking on a typical "broomed" appearance. Only a few stems may be involved, or the entire plant may show the damage.

The stunted leaves of infested terminal shoots turn brown earlier in the fall than the normal foliage, and there may be abnormal fall flowering on infested stems. In the winter, the broomed terminals are easily observed and quite unsightly. These terminals usually die during the winter but persist the following season; they must be pruned out to maintain an attractive shrub.

Several successive years of honeysuckle infestation may lead to severe stunting or even death.



This honeysuckle stem shows typical "brooming" damage caused by honeysuckle leaffolding aphid. Note the premature death of many affected leaves.



A healthy honeysuckle stem (left) and an aphid-damaged stem (right), in July.

Life cycle

The honeysuckle aphid overwinters in the egg stage on the terminal shoots. Eggs are usually protected by the folded leaves of the broomed areas. The eggs hatch in early spring when buds begin to swell. The young aphids crawl to the developing buds to feed. As the foliage forms, the young aphids start feeding on the leaves, mostly on their upper surfaces, causing them to fold up.

Like most other aphids, the honeysuckle aphid reproduces most of the year without mating. Unmated females give rise to other females by live birth. In this fashion they can produce new generations every 7–14 days.

The earliest two or three generations consist mostly of wingless individuals that stay in place, forming large colonies. The young of later generations develop into winged adult females, which usually fly off to other shoots and start new colonies on the stem tips. These new colonies again go through the first two to three generations of mostly wingless individuals and then start producing migratory winged adults. This cycle continues until September, when males and wingless females are produced and mate, resulting in the production of overwintering eggs.

The adult aphids are quite small—less than 2 mm (1/12 inch) long. Their color varies from cream to pale green.

Control

Natural controlling factors, such as predaceous insects and harsh weather, have not kept this insect from causing damage. Overwintering eggs have even survived temperatures below –30°F. Thus, cultural and chemical methods of control may be necessary.

Cultural

Removing and burning the previous season's infested shoots in winter will destroy the overwintering eggs. However, winged females may re-invade the plant in spring. In Wisconsin, honeysuckle is a frequently used landscaping plant, and abandoned and wild plants occur abundantly. For winter pruning to be fully effective, it must be done over a large area, which is usually impractical. However, it may benefit isolated plantings and certainly will improve the appearance of individual infested plants.

Studies indicate that there are some resistant or tolerant species and cultivars that do not usually need treatment. Because of the confusion in labeling and taxonomy, it is best to check with your local nursery for availability of resistant cultivars. Susceptible species include *Lonicera tatarica* and *L. microphylla*.

Chemical

Chemical insecticides provide satisfactory control if used properly. On plants that have been only lightly infested in past years, treat once at the first sign of damage. If necessary, treat again 10–14 days later. Plants that have been heavily infested year after year may need more aggressive treatment. Make an application in late April to kill the young aphids hatched from overwintering eggs. From late spring through summer, winged females are constantly present and migrating from infested to healthy plants. During this time, apply insecticides at 10–14 day intervals to maintain normal and healthy plant growth. If you can accept less protection, lengthen the interval between applications.

Both contact and systemic insecticides are effective. Generally, systemic insecticides give longer residual activity and better control of aphids protected by folded leaves. Products that contain acephate, azadirachtin, cyfluthrin, or oxydemeton methyl are effective.

References to products in this publication are for your convenience and are not an endorsement of one product over other similar products. You are responsible for using chemicals according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from chemical exposure.



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