

ASK THE EXPERT

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Aphid damage resembles herbicide injury

Problem: One of our clients complained that their honeysuckle hedge plants were damaged by our lawn-applied herbicides. The symptoms did indeed look like a herbicide problem. However, upon close observation, we found small insects. The problem was mainly at the tip of the branches, with leaves showing a curling-up type of symptom. We tried to explain that it appeared to be an insect problem and not a herbicide injury. What do you think is the possible problem and solution? (Pennsylvania)

Solution: Based on your description of the symptom, the problem appears to be related to honeysuckle aphid injury. Honeysuckle aphid, *Hyadaphis tataricae*, is common in Eastern Europe and since 1976 has been found in many parts of North America, where bush honeysuckle plants are grown.

Due to extensive aphid feeding activity and the toxic effect of aphid saliva, affected leaves show growth distortion and mimicking symptoms of herbicides. Extensive feeding can cause the shoot to grow slow, resulting in a "witches" broom of terminal twigs and foliage. The leaves will be folded and may be slightly chlorotic (pale) due to the sucking, feeding activity of aphids.

Honeysuckle aphids overwinter on twigs and stems, and hatch into stem mothers in the spring during budbreak. These stem mothers produce many young aphids asexually. Stem mothers and newly-born aphids feed on the underside of leaves. In late summer, additional generations of aphids will be produced. They feed on the upper surface of leaves, causing them to fold upward. This upward folding can be mistaken for dicamba herbicide injury. These aphids have a whitish powdery wax over their bodies. In September, winged males and wingless females can be found.

Reportedly, species of honeysuckle such as *Lonicera tatarica*, *L. kovalkovi* and *L. microphylla* are susceptible to these aphid problems.

Consider treating with insecticides such as acephate, malathion or a horticultural oil in early spring. Reports indicate that in order to stop them during the "witches" broom growth, applications should be made before foliage appears. Repeat applications as needed, and read and follow label specifications for better results.

To prevent run-off, spray only till wet

Problem: When we spray trees and shrubs with insecticides and fungicides, the excess pesticide mixture generally drops onto mulch underneath the plants. How can we avoid this? Can we use any sticker products to prevent this? And how long do we need to keep pets or the public away from the area? (Maryland)

Solution: Follow good application techniques to minimize drift and/or excess spray solution being deposited on understory plants or mulch.

Reports have indicated that it is sufficient to wet the foliage; there is no need to spray to the point of drip. In most cases where the problem is primarily foliar, spraying to the point of leaf wet-

ness is sufficient to manage pest problems.

Most pesticides contain a type of spreader/sticker material. Generally, there is no need to use a sticker-type material unless the label suggests to do so. Therefore, in my opinion, follow good application techniques and spray to the point of wetness.

For a reentry waiting period, as a general guideline, keep away from the treated area as per label restrictions. Since the mulch area is a non-target site, there should be very little spray deposit resulting from tree spraying.

Generally, keep away until the surface is dry. If someone is overly concerned, it would be better to avoid getting pesticide on the mulch by covering the area with a tarp.

Strange growth caused by oak leaf blister

Problem: What would cause oak leaves to have risen and uneven growth? There is no evidence of any spots, insects or mites on the leaves. Based on pictures and descriptions in reference books, we believe the problem may be oak leaf blister disease. If you think this is the problem, how do you manage this disease? (Ohio)

Solution: Oak plants have many leaf problems that will cause the symptoms you described. For positive identification, consult your local cooperative extension personnel.

Based on your description of the symptoms, I believe that the problem could be related to frost injury, herbicide injury, anthracnose or most likely, oak leaf blister. If it is blister, normally you will see the raised area on the upper surface of the leaves.

Generally, in the early summer, local areas of leaf tissues grow faster than the rest of the leaf and cause the "blister" effect. The lower surface of the leaves will curve inward, without any fluids. These blisters are often lighter green than the normal leaf tissue. Generally, it is not a major threat to oaks. However, if the disease is severe, it could be aesthetically objectionable, and can often result in mid-summer defoliation.

Oak leaf blister, caused by the fungus *Taphrina caerulescens*, doesn't often become severe enough to require fungicide treatment. However, for aesthetic reasons and to minimize defoliation, if the disease potential becomes great, an application of fungicides such as zineb, captan, maneb or mancozeb should help manage the problem.

Reports suggest that one application of fungicide before bud break should help manage oak leaf blister; however, applications after bud break are usually not effective. Read and follow label specifications for better results.

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Mail questions to "Ask the Expert," LANDSCAPE MANAGEMENT, 7500 Old Oak Blvd., Cleveland, OH 44130. Please allow two to three months for an answer to appear in the magazine.