

PROBLEM MANAGEMENT

by Balakrishna Rao, Ph.D.

Identifying mildew disease

Problem: Every year on oak trees we see whitish powdery growth on the lower surface of the leaves. We also see a number of small, black specks present in this area. Is this caused by mites? What can be sprayed to control this? (Ohio)

Solution: From your description of the symptoms, the problem you are dealing with appears to be caused by a fungus that causes powdery mildew disease. The black structures you have been seeing are probably not mites, but are the fruiting bodies of the fungus that contain fungal spores. Several different powdery mildew fungi attack oak. These include *Sphaerotheca lanestris*, the most troublesome mildew producer. Others include *Erisiphe trina*, *Microsphaeria alni* and *Phyllactinia corylea*.

An application of fungicides like Acti-done PM, Benlate or Karathane is recommended to manage the powdery mildew disease problems.

It is possible that mites may also be present on the same plant. For detecting mites, shake the leaves over some white paper or cloth. If there are many mites, they will fall and begin to crawl on the white surface. Mites have eight legs while insects have six legs. Mites leave a staining mark on the white surface when crushed. Verify this possibility just to be sure.

If the problem is identified to be due to mites, an application of dormant oil during early spring or an application of miticides such as Kelthane in mid-June and again two to three weeks later should help minimize the problem.

Controlling poison ivy

Problem: We have a major problem with poison ivy plants in some of our clients' properties. What is the best way to control these. Can we use Roundup? (New York)

Solution: Treatments with amitrol (Amizole, Aminotriazol or Weedazol), a post-emergence herbicide, reportedly provides excellent control of poison ivy. It is a non-selective herbicide designed to be applied onto the foliage of perennial broadleaf weeds like poison ivy. It will be absorbed by the leaves and translocated to the stems and roots. It is very effective against poison ivy. Avoid contacting desirable, non-target plants because it will turn the leaves yellow, white and then brown.

Use amitrol as a spot treatment for perennial weeds like poison ivy in or near nursery crops or landscaping. For best results, treat weeds at full leaf, about four to six feet high, and before blooming.

Check with your county extension agent for clearance to use this product in your area. All registrations for the use of amitrol on food crops, including pastures, have been cancelled. Avoid using it in an area where there is a chance of food or feed contamination. A waiting period of six to eight weeks is

required before planting any plant material.

Roundup is also registered for managing poison ivy plants. For managing these apply four to five quarts of Roundup per acre as a broadcast spray or as a 2 percent solution with hand-held equipment. Remember that Roundup will be absorbed through actively growing green leaves. Therefore, thorough coverage is necessary. Repeat applications may be needed for good results. Fall treatments should be made prior to leaves losing green color.

Why power rake?

Problem: Why power rake, since power raking does little to reduce thatch? (Colorado)

Solution: You are right: power raking does little, if anything, to reduce thatch. I don't believe that any professional turfgrass manager or lawn care professional would be recommending power raking to reduce thatch, except under certain situations.

Those who believe in the misconception that the clippings can contribute to thatch development may perform this. However, power raking might be useful in removing excess dead blades or plants that are present, often due to infrequent mowing. This can occur if the turf is allowed to grow tall before mowing, which deposits excessively long clippings. In this situation, blades will decompose slower than if they are mowed frequently.

Ideally, turfgrass should be mowed whenever growth is 1/2 inch taller than the recommended cutting height for a particular cultivar. A good mowing schedule and practice will eliminate the need for removing long clippings.

The areas damaged by insect and disease or abiotic stress factors may also be benefited by power raking to remove the dead or matted blades. **LM**



Balakrishna Rao is Manager of Technical Resources for the Davey Tree Co., Kent, Ohio.

Questions should be mailed to Problem Management, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.