

PROBLEM MANAGEMENT

Managing gall on ornamentals

Problem: How is the crown gall problem managed on ornamental plants? (Pennsylvania)

Solution: Crown gall is a bacterial disease caused by *Agrobacterium tumefaciens*. These galls are usually formed on roots, lower stems and lower branches. Severely infected plants may decline and eventually die.

The bacterium (pathogen) enters the susceptible plants through wounds, which may result from transplanting, cultivating, pruning, insects, animals, etc.

To manage the problem, the following guidelines might be helpful:

- Avoid wounding susceptible plants at or near the soil line.

- Selectively remove infected plant parts when dry and disinfect pruning tools with Lysol or 10 percent household bleach between each cut to minimize disease spread.

- Remove severely infected plants promptly.

- Avoid planting susceptible plants such as apple, pear, brambles, euonymus, forsythia, Russian olive, grape. Plants such as hemlock, linden, holly, hornbeam, pine and spruce are known to be resistant.

- Chemical control: Galltrol-A and Gallex are two products from Ag Biochem, Inc. in Orinda, Calif., which are registered for use on several plants. Galltrol is a biological control material for crown gall management. This is used as pre-plant dip in greenhouses and nurseries. Pre-existing galls are not controlled with this material.

Gallex is recommended for eradicating existing crown galls. This material is painted on exposed galls, cut surfaces and nearby healthy tissue. Large galls should be removed prior to treatment. If new galls are found after four to six months, repeat treatment as needed.

Removing tall fescue

Problem: Could you tell us how we can selectively remove tall fescue from established lawns? (Ohio)

Solution: A product called Lesco TFC dispersible granule turf herbicide from Lesco, Inc. is labelled for spot treatment to manage tall fescue. At rates of 2.76 to 5.33 oz. per acre, tolerant turf species such as Kentucky bluegrass, bentgrass, fine fescue, bahiagrass and bermudagrass show little phytotoxicity.

Spray to wet the foliage of unwanted tall fescue and avoid contacting this product on nearby ornamentals. Over-application may cause injury to desirable grasses. Application can be made in spring or fall when growth is active and desirable turf is not under stress. Fall treatment is preferred over spring.

Apply when the soil temperature is about 40°F or more. Yellowing of clumps will take one to three weeks and control can be expected in four to eight weeks.

After treatment the material translocates to growing points, prevents cell division, and inhibits growth. Yellowing and reddening gradually develops before dying. From the fall applications tall fescue plants may or may not die that same season. However, they will show discoloration in fall and die in spring.

Reports indicate that the product can adversely affect ryegrass and in some situations, it can kill. Therefore, be careful when dealing with lawns containing ryegrass.

If it is used properly, Lesco TFC Herbicide can be a very good alternative to digging or using non-selective herbicides such as Roundup for tall fescue control. Read and follow label specifications for good results.

Black spots in maples

Problem: We are seeing a number of maple trees developing black spots. These are slightly raised. Until mid-August, these were not seen; however, suddenly around mid-August we received several calls from our clients. What is the problem? What can be done to manage this? (Ontario, Canada)

Solution: Based on your field observation of the foliar symptoms, the problem you are referring to is called tar spot fungal disease caused by *Rhytisma acerinum*. This year in August I have seen this problem on maple in the Buffalo, Rochester and Niagara areas.

The fungi overwinter as immature fruiting bodies in the spots on fallen leaves. In spring the fruiting bodies mature and release spores which spread to susceptible maples. The fungus grows inside the leaf tissue and produces thick, tarlike, irregular shining spots on the upper side of leaves. These spots are slightly raised from the other areas of leaves. Fruiting bodies of the fungus develop inside these thick areas (called stroma) during summer.

Tar leaf spots generally don't affect the health of the tree. The major problem is aesthetics. If the disease is severe the following spring, consider applying fungicides such as maneb, mancozeb, zineb, fixed copper or Bordeaux mixture. Make the first application at budbreak and repeat two to three at 10- to 14-day intervals.

Fertilizing affected trees with a slow-release source of fertilizer and deep root delivery system would also help improve the plant health and vitality.

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.

494 15
29042 011