

# ASK THE EXPERT

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## Azalea troubleshoot

**What would cause azaleas that have been in the ground for several years to begin to look bad? (Pennsylvania)**

**Solution:** In your part of the country, azaleas can develop a number of problems: mites, lacebugs, phytophthora root rot and iron deficiency chlorosis.

They are also sensitive to extremes in moisture and/or temperature. Consider the possibility of exposure to drought since 1988. Also, last year's winter sub-zero temperatures affected a number of shrubs, including azalea.

Stress will weaken the plants and make them vulnerable to a number of pest problems. If the soil pH is high (alkaline), micronutrients—particularly iron—will be tied up in soil and will be deficient in leaves, resulting in chlorosis.

Apply mite and lacebug control as needed. If you are considering using Dursban, use Dursban WP instead of the EC formulation. Azaleas are phytotoxic to the EC formulation. For root rot disease management, consider using fungicides such as Subdue or Aliette.

- For micronutrient disorder, have the leaves and soil tested to determine the deficient element. Then provide the corrective treatment as needed.

- Drought or low temperature injuries are difficult to diagnose, particularly if considerable time has elapsed since the injury occurred. However, clues such as the time the symptoms appeared, plant exposure, whether or not the damage is confined to specific plants or species, and whether or not there is a clear time of demarcation between damaged and undamaged tissues help establish the cause.

## Will Epsom salts cure chlorosis?

**One of our customers asked whether Epsom salts can be used to correct chlorosis in maple trees. What is your opinion? (Michigan)**

**Solution:** Yes—if the chlorosis is caused by a magnesium deficiency. Epsom salts contain magnesium sulfate. They are recommended for trees having chlorosis problems caused by low magnesium levels.

Generally, if the pH needs to be increased, an application of dolomitic limestone, which contains magnesium carbonate and calcium carbonate, is recommended.

Soil in your area may have a naturally high pH. If so, an application of dolomitic limestone is *not advisable*.

Under high pH alkaline soil conditions, micronutrients such as manganese and/or iron would tie up in soil, even if they are present in sufficient amounts. Generally, in the Northeast, manganese is the primary deficient element in maple chlorosis disorder. I believe someone might have mistaken magnesium for manganese and suggested Epsom salts.

The best thing to do is to have a foliar and soil nutrient analysis. Correct the problem according to test results.

## Curing dieback on Bolleana poplar

**A large number of Bolleana poplar trees are showing extensive dieback and decline. We were told that these trees are supposed to be resistant to cankers. However, we see a large number of cankers. How can we treat these problems? (Tennessee)**

**Solution:** The Bolleana poplar (*Populus alba* 'Pyramidalis') has often been used to replace the less hardy Lombardy poplar. Its narrow, upright form makes it a popular screening tree.

However, it is relatively short-lived and is subject to canker diseases. It also produces a lot of suckers, especially when a live tree is cut down. It is very fast growing.

The fungal organisms which cause cankers establish on stressed, weakened trees. The past several years' drought has adversely affected a number of trees. Maturing poplar plants, when exposed to extremes in moisture and/or temperature stress, will be susceptible to canker diseases.

Poplar plants are susceptible to several fungal canker diseases such as cytospora canker (*Cytospora chrysosperma*); poplar canker (*Cryptodiaphorthe populea*); imperfect stage (*Dothichiza populea*); fusarium canker (*Fusarium solani*); or hypoxylon canker (*Hypoxylon pruinaum*). To further identify causal agents, a laboratory diagnosis is needed.

Canker diseases are difficult to manage. There are no fungicides registered to manage this problem. Remove and destroy severely diseased plants. Selectively prune diseased plant parts, water, mulch, fertilize and provide pest management as needed to improve plant health and vitality.

## Necrotic ring spot

**Problem: What fungicides can be used to manage necrotic ring spot, and when is the best time to treat it? (Canada)**

**Solution:** For necrotic ring spot disease on turfgrass, reports indicate that fungicides such as Banner, Rubigan or Tersan 1991 should be used.

Check with your Ministry of Environment about the availability of Banner and Rubigan in Canada. Also check your Tersan 1991 label to see whether the product can be used for necrotic ring spot in your area.

Follow good cultural practices such as proper mowing, watering, fertilizing and aerifying to improve turfgrass health.

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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.**