

ASK THE EXPERT

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Red thread varieties differ

Problem: I understand that Bayleton can control red thread disease. Does this mean that it will control both the newly-described red thread—*Laetisaria fuciformis*—and pink patch (*Limonomyces roseipellis*), or will it control the old-name red thread (*Corticium fuciforme*)? (Pa.)

Solution: Reports indicate that Bayleton will control the red thread disease caused by *Laetisaria fuciformis* (new name) or *Corticium fuciforme* (old name). It will not control pink patch caused by *Limonomyces roseipellis* (new name).

Therefore, to properly manage these problems, it is important to identify the disease first. The following discussion may help you diagnose these two newly-described diseases.

Recently, turfgrass pathologists renamed red thread disease caused by *Corticium fuciforme* (old name) into pink patch (*Limonomyces roseipellis*) and red thread (*Laetisaria fuciformis*). Both these agents can affect *Lolium sp.* and *Fertuca sp.*, but only red thread is reported to affect *Agrostis sp.* and *Poa sp.*

Pink patch spreads slower than red thread; therefore, it will be less severe and won't affect the growth rate of turfgrass. Leaves will be covered with pink, membranous mycelial growth. Pink patch differs from red thread by the lack of red, thread-like mycelial growth on leaf tips and the pink, cottony flocks of anthrocondidia. Because of this, it spreads slowly; therefore, often pink patch disease can be managed by cultural practices such as proper mowing and feeding programs.

The red thread disease can be prevalent during spring and autumn on slow-growing, nitrogen-deficient turf. The fungal agent kills the affected blades and then pink- or reddish-colored threads protrude from the tip of the leaves. When the disease is active following humid weather, the diseased areas appear reddish-brown. If the disease is severe, provide adequate supplemental nutrients in addition to fungicides.

Big-eyed bugs vs. the chinch

Problem: I've heard of a big-eyed bug that feeds on chinch bugs. Would you please give me some hints on how to identify this insect? (Pa.)

Solution: Big-eyed bugs feed on chinch bugs and other insects found in turfgrass. Like chinch bugs, they are also thatch-inhabiting insects. In the United States, about 20 species of this predator insect exist. Big-eyed bugs can infest lawns and feed on all stages of chinch bugs and effectively reduce their population. Even though they may appear to feed on turfgrass, their major source of food is insects.

Adult chinch bugs and big-eyed bugs look similar in appearance. Use a 10x hand lens and study the following features for identification: The body of the chinch bug is narrow with a small, pointed, triangular-shaped head and small eyes. The body of the big-eyed bug is wider with a larger blunt head and two large prominent eyes. Big-eyed bugs move faster and are more active than chinch bugs. If you crush a chinch bug, it has an unpleasant odor.

Safest deicing chemicals

Problem: What kinds of deicing salts would be effective, inexpensive and safe to use around sidewalks and roads having landscape plants or street trees nearby? We are thinking about using urea. Is it a good idea? I appreciate your comments. (N.Y.)

Solution: Common deicing salts, sodium chloride (NaCl) and calcium chloride (CaCl₂) have freezing points, in solution, considerably below that of water. Sodium chloride has a minimal freezing temperature, in solution, of -21.2° C. and calcium chloride goes down to -55° C. Both salts also give off heat when dissolved in water but, because of the small amounts applied, the heating effect is negligible.

Calcium chloride is less toxic than sodium chloride but it is two to eight times more expensive. In addition, it readily absorbs moisture and cakes, making it difficult to apply. Calcium chloride's melting ability at low temperature is particularly important in areas where temperatures routinely drop below those where sodium chloride is effective.

We could find very little information concerning the use of urea as a deicing agent. One source suggested a rate of 1 lb. urea per 10 sq. ft. We tried both urea and sodium chloride at this rate and found sodium chloride to be noticeably more effective when the temperature was several degrees below freezing. Urea is supposedly most effective just below freezing.

Urea is less likely to injure plants than sodium chloride and causes less injury to metals and concrete. However, the lower effectiveness and higher cost may limit its use as an ice melter.

Abrasives such as sharp sand are sometimes used alone or in combination with salt. Their effectiveness has been questioned, however, since they have no melting power and may, in fact, insulate and contribute to ice build-up with additional precipitation.

In spite of the problems in using sodium chloride, the advantages apparently outweigh the disadvantages and it remains the most widely used chemical ice melter.

The practice of physically removing most snow and ice, then following up with judicious applications of sodium chloride, should help protect both plants and people.

Home study course in horticulture

A reader wrote to tell us of a home study course at the University of Guelph, Ontario.

It is a diploma program that offers study towards a degree in agriculture or horticulture. Areas of study include turfgrass management, landscape management, etc. Contact the University of Guelph, Independent Study, Guelph, Ontario, Canada N1G 2W1.

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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.