Salty situation
I manage turf in the central San Joaquin Valley of California with high levels of salts, chlorides and sodium in the soil. Common bermuda and tall fescue are dominant grasses (in different areas). What are the best seed choices for overseeding or for the seeding of new lawns, in soils of this type?

— CA

According to the adaptation map, both the tall fescue and bermudagrass will grow in your area. However, the National Turfgrass Evaluation Program (NTEP) report indicates that bermudagrass tolerates salt very well, while tall fescue tolerates salt only moderately well. As far as alkaline tolerant turfgrass, only bermudagrass was mentioned. For the most current information on tolerant species, check out the NTEP's Web site at www.ntep.org.

Pine needle scale and sawfly
Mugo pine and other pines on our clients' properties are affected by pine needle scale and pine sawfly every year. How well does Merit insecticide control these diseases?

— PA

One way to manage pine needle scales and pine sawflies is to use the multiple target principle, which allows you to gain control of more than one pest with an insecticide application. Before you do this, check if the product is active on other target pests and the timing coincides.

Pine sawfly is on Merit's label, so it should manage the problem well. The reason Merit can manage sawflies is that it's root absorbed and moves to new candles. If the soil is dry when you apply the product, irrigate to improve its movement within the plant. This increases its effectiveness.

Treat for pine sawflies in the fall for best results. Merit will manage the larvae when they hatch and feed on the new growth the following spring.

If you miss the fall treatment, treat early in the spring, early March, if possible. Sawfly eggs hatch during late April or early May. Be aware, however, that if the soil is saturated from melting snow or rain, the product uptake may be affected. Another problem is the short duration between treatment time and egg hatch. Also, if the pine trees are large, the product may not be distributed fast enough throughout the tree to protect the needles.

Don't expect a good result from managing pine needle scale with Merit, particularly if the scale infestation is heavy. Pine needle scale is a sucking pest with a hard or armored scale cover. You may get some suppression from the treatment, but reports indicate you can't depend on the treatment for scale management. After treating in fall, monitor the population the following spring. If scales are present and still alive, provide management as needed.

Insecticide failure
I applied insecticide to a client's property, but it didn't solve the problem. What could have gone wrong?

— VT

Several factors may be responsible for poor insect and mite control on ornamental trees and shrubs.

Here are several beyond those I detailed in last month's Landscape Management article, "Why Insecticides Fail," found on page 58.

Failures related to lack of product knowledge include: improper selection of product or formulation; slow activity on target pests; too-high customer expectations; low concentration of mix; failure to penetrate surfaces; phytotoxicity; product is too old or photodegraded; solvent in the mix; volatilization; spoiled or separated product; high pH of water; chemical incompatibility of products or product has the wrong type of activity; and several others. Short or no residual effect or heavy pest infestation may also come into play.

Failures related to misunderstanding the treatment methods include miscalculating the active ingredient; improper mixing/agitating; improper tank cleaning; lack of surfactant or buffering agents if needed; failure to incorporate into soil; too much organic matter inhibiting application from reaching pest; failure to water-in or use water correctly in mix; failure to apply at proper times; improper equipment or calibration; poor uptake into trees for trunk injections; failure to penetrate insect's protection; rain wash-off; failure to reach the target because of barriers; wind drift; soil conditions; and others.

Failures related to timing involve pest growth stages; incorrect temperature; hatching sequence; emergence after residual is gone; activity only when pest is young; and other factors.