Spruce spider mites

We are having some problems in managing spruce spider mites. What would be the strategy or program we should practice?

— MINNESOTA

Spruce spider mites can present a serious problem if not managed properly. This cool-season mite is active in the spring and again in the fall when the temperatures are cool. However, most people notice the damage during summer and often treat at that time with mixed results. During summer, when the temperature is 80°-90°F or higher, mites will go dormant or undergo diapause (in effect, resting or inactive). At this time treatment response will be poor.

Reports indicate that some mite activity can occur during summer if the temperatures are cooler. In these situations, thoroughly check the suspect plants for mite activity. This requires shaking the spruce branches, which show the mite feeding symptoms of stippling, over a white cloth or paper. If mites are found, provide proper management as needed.

Treatment timing and rotation is the key for a successful mite management program. Often multiple applications of miticides may be needed throughout the season. The following mite management program guidelines should work in your situation.

Apply a fall or winter application of horticultural oil to manage the adult, nymphs and overwintering eggs. Remember that oil does not have any residual. It can be a hit-and-miss operation so make sure to provide proper coverage, following the label guidelines.

Miticide products such as Morstan, Kelthane, Hexagon, Avid, Talstar, Dursban, Orthene soil injection and insecticidal soap can be applied in April-June.

Since the residual effect of some of these products may vary from a few days to three to four weeks and the economics and regulatory requirements vary from product to product, you will want to consider which product is best for you.

Inspect the suspected spruce plants for mite activity during summer. If found, treat as needed. If the mites are inactive, treatment performance may not be satisfactory at this time.

Mite activity may peak during fall so consider treating again with any of the above listed products during the September-October period.

Be aware that horticultural oil treatments will remove the blue color from blue spruce by removing the whitish coat. However, subsequent new growth will have the blue coloration.

Review the product label and other pertinent literature regarding economics, safety, efficacy, and environmental concerns. Use the chosen products on a rotation basis to avoid possible resistant population builds. Read and follow label specifications for best results.

Needling Austrian pine

What causes the banding on Austrian pine needles? We see some browning of the needles. Is it related to a disease? What is the best control?

— WISCONSIN

Based on the description of the problem and symptoms you are describing, the problem is likely to be a needle blight disease caused by Dothistroma pini. This fungus can produce dark spots or bands on one-year-old needles. The problem begins to show up in late summer. Often the infected portion may be swollen and the needle section above this site turns light brown and dies. The tree may drop needles prematurely under severe disease incidence. As a result, the tree may have a thin canopy.

To control this disease, consider applying fungicides such as Bordeaux mixture, Cleary’s 3336 or other copper fungicides in late April or early May. Provide the second application approximately three weeks later to help manage the needle blight disease.

Read and follow label specifications for best results. LM