ask the expert

BY BALAKRISHNA RAO

## Ailing spruce

What can I do to improve the health of one of my customer's evergreens?

- MI

The following factors can lead to a spruce being in bad health:

- Improper planting too deep or too high
- Excess moisture drowning the root system and corresponding top growth
- Excess fertilizer burning the absorbing roots
- No post-planting care, particularly proper watering — too much or too little can affect overall health
- Site related problem affecting establishment of newly planted tree
- Transplant shock
- Girdling from rope or thread at base of plant
- Mite and/or fungal disease like cytospora canker and/or rhizosphaera needle cast

Study the plant on site for these possible causes and provide their corrections as needed. Also, consider sending samples to state or private labs for further diagnosis.

## Dursban alternatives

We want to use Dursban for borers. How much longer will we be able to buy and use it, and what are some alternatives? — IL

According to the EPA, the Revised Risk Assessment and Agreement with Registrants for home lawns and most other outdoor uses concerning Dursban (chlorpyrifos) is as follows: stop formulation 12-01-00; formulators stop sale 02-01-01; retailers stop sale 12-31-01.

A Dow AgroScience representative said that Dursban can be purchased and used

until the end of 2001. After that date, only the inventory can be used until everything is gone. This doesn't mean that you can purchase a large quantity of Dursban to use for an extended period of time because we don't know how long Dow Agro-Science, Dursban's manufacturer, will continue the registration for landscape ornamental use. As long as Dursban is registered by Dow AgroSciences, the inventory can be used up.

In the meantime, you should become familiar with insecticides such as Astro, Merit or other pyrethroids. Pay attention to the pests being managed with the particular rates and methodologies that need to be followed. You need to become familiar with the life cycle of specific borers and their number of generations to develop a borer management program.

Consider that, for borers, Astro is applied on trunks and branches, while Merit is applied to the soil. Water after treating with Merit to move the insecticide to the root zone.

## Dimension vs. Dimension Ultra

What is the difference between Dimension and Dimension Ultra?

- OH

Dimension 1 EC and Dimension Ultra are formulated differently. Dimension 1EC is a liquid with a solvent-based formulation that has a warning label due to its potential volatility in the field when applied. It can be stored at below 32°F and has a slightly shorter shelf life than Dimension Ultra.

Dimension Ultra is a powder formulation in water soluble bags. It has a caution label, but it's safer than Dimension 1 EC. Also, it has a longer shelf life and doesn't volatilize. Therefore, less active ingredient (25% less) can be used per acre than Dimension 1 EC. Dimension Ultra will cost less per acre treated. It shouldn't be stored below 32°F because it may cake. Because of the powder formulation in water soluble packets, Dimension Ultra needs to be agitated while it's being mixed, so it can't be used in backpacks.

In your situation, you may want to have both formulations in your inventory. For mixing smaller quantities without agitation, such as for backpacks or pump sprayers, Dimension 1 EC is the one to use. Dimension Ultra WSP is better for treating larger areas because of its caution label, need for agitation while tank mixing, 25% less active ingredients/acre and lower cost.

As far as the efficacy, both formulations will perform the same. The requirement to wait eight weeks to seed after application is the same for both. Both will have similar broadleaf activity on weeds such as oxalis, spurge, knotweed, henbit, purslane and buttercrest.

As far as which one is easier to use, it depends on the equipment and your operational needs. Perhaps the water-soluble bags would be easier than 1 EC formulations because they offer less exposure and eliminate the need for measurement. However, you still need to get the correct calculation of herbicide needed to make the proper treatment

mix. If you don't have an agitation system in your application unit, then 1 EC would be easier to use.

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