

PROBLEM MANAGEMENT

Treatments for oak wilt

Problem: Are there any fungicidal treatments being studied for oak wilt? (Ohio)

Solution: Yes, there are fungicidal treatments showing promising results on certain species of oaks. Ciba-Geigy representatives report that their experimental liquid fungicide, Alamo, is being used to manage oak wilt caused by *Ceratocystis fagacearum* on live oaks in Texas. At present, Alamo has a special label permit for use on oak wilt disease of live oaks, in Texas only.

The systemic fungicide is injected into the trees at the root flare, similar to the Dutch elm disease treatment technique with Arbotect. Ciba-Geigy representatives recommend that trees which have more than 30 percent canopy loss should not be treated. Preventive treatments are apparently more effective. They also suggest that trees which are within 150 feet of the affected trees and have greater potential for getting infected should be treated.

Ciba-Geigy suggests that for preventive treatments, use Alamo fungicide at 2 ml/liter per inch of trunk diameter. Use the therapeutic rate (3 ml/liter/inch trunk diameter) on trees that have specific oak wilt symptoms, but have less than 30 percent crown loss.

Let us hope that Alamo or similar other fungicides may become available in the near future to manage this destructive disease on oaks in other regions of the country.

Will rain nullify Cygon?

Problem: What effect would rainfall at midnight of the same day have on a birch tree sprayed with Cygon 4E at 6 p.m.? (Toronto, Canada)

Solution: Generally, two hours of drying weather is sufficient to prevent excessive pesticide from being washed off leaf surfaces with rain. Since Cygon is a systemic insecticide, it will be absorbed through leaf tissue and distributed within the plant. Once absorbed, the material is not subject to rain water washing. In your situation, there was about six hours time lapse between applicator and rain fall and, therefore, pesticide loss should not be a problem.

However, if the material remained on the foliage for an extended time without quickly drying, this may contribute to phytotoxicity and/or be subject to rain water washing. This would adversely affect the product efficacy and performance.

Read and follow label specifications for better results.

Repairing glycol damage

Problem: What can be done to correct the accidental spill of material used in our cooling and heating system. We believe it is ethylene glycol. The turfgrass

around the affected area is doing poorly. Will it recover? (Texas)

Solution: In answer to your question, Richard Rathjens, senior agronomist with Davey Tree, made the following comments:

"Ethylene glycol ($C_2H_6O_2$) is commonly used as an antifreeze in cooling and heating systems. Ethylene glycol is known to be toxic to plants in the landscape.

"Depending on factors such as the amount spilled, soil type, rainfall that occurred following the spill, etc., the accidental application of ethylene glycol to a lawn will probably kill the existing grass plants. Likewise, ethylene glycol in the soil can prevent new plants from becoming established. For this reason, the sod and soil to a depth of at least eight inches should be removed and replaced prior to reestablishing the lawn by sodding or seeding. If during the removal of soil ethylene glycol is detected below eight inches, the additional contaminated soil should also be removed."

Also, consider doing a bioassay of soil from the affected areas prior to seeding or sodding to make sure that the contamination from ethylene glycol is not going to present a problem in the future.

Horticultural oil vs. scale crawlers

Problem: In our IPM program, we would like to use horticultural oil. We are planning to use a first application to manage the eggs of scale insects. We are thinking of applying oil again to manage the crawlers. How good is oil against scale crawlers? (New York)

Solution: An application of horticultural oil (superior refined oil) during late winter or early spring will help manage the scale eggs. Oil will smother the egg mass, suffocate and kill them. Thorough coverage is important for good results. Often it is difficult to reach every scale. As a result, some will escape and hatch. The newly-hatched young nymphs are called scale crawlers, which can move around and reinfest the host.

Horticultural oil can be used to manage scale crawlers. Follow label specifications for good results. Avoid treating maples—beech, hickory and dwarf Alberta spruce. These plants are sensitive to oil spray and may experience phytotoxicity, particularly when stressed. Oil can also remove the bluish color of the blue spruce. It may take a few months to get the color back.



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Questions should be mailed to Problem Management, LANDSCAPE MANAGEMENT, 7500 Old Oak Boulevard, Cleveland, OH 44130. Please allow 2-3 months for an answer to appear in the magazine.