

# ASK THE EXPERT

DR. BALAKRISHNA RAO



## Liquid enhancers defined

**Problem:** What is the difference between spreaders, stickers, anti-desiccants, wetting agents, adjuvants and surfactants? An explanation would help us in using some of these products. (Pennsylvania)

**Solution:** The following definitions should help you better understand these products:

**Spreader:** a substance which increases the area that a given volume of liquid will cover on a solid or on another liquid.

**Sticker:** a material added to a pesticide to increase tenacity rather than to increase initial deposit.

**Anti-desiccant:** a chemical applied directly to a plant which reduces the rate of transpiration or water loss by the plant.

**Wetting agent:** a compound which reduces surface tension and causes a liquid to contact plant surfaces more thoroughly.

**Adjuvant:** a substance added to a product to aid the activity of the main ingredient; said product may be formulated to have one or more surfactants, solvents or co-solvents, solubilizers, buffering agents, film formers and other materials to provide specific functions.

**Surfactant:** a "surface active agent" whose function may be as a wetting agent or a component of an emulsifier or a spray adjuvant; some have been used successfully to enhance herbicidal activity.

Before choosing and/or using any of the above products, make sure what function you would like them to perform and check whether their stated function fills your need. Also, read and follow label specifications for best results.

## Cultural control of rot fungus

**Problem:** Once in a while, we find large, reddish, thick, fleshy-type mushroom growth at the base of trees. They also have a varnish-like coating on them. The mushroom growth doesn't appear to be an "umbrella" like most mushrooms. They are normally found on red and Norway maples, which show decline and have dieback. Is there any fungicide to prevent and/or manage the problem? (Kentucky)

**Solution:** The problem appears to be related to ganoderma rot. This fungus is known to affect red and Norway maples, which appear to be most susceptible.

No fungicide treatment will manage the problem. Perhaps carefully removing the fungal growth and letting it air dry might help prolong the life of affected trees. Provide proper watering, fertilizing and mulching as needed to help improve plant health. Also, avoid basal bark and/or root injury.

## Juggle control windows for grubs, worms

**Problem:** We are thinking of using Sevin insecticide to control white grubs. We also have residential and com-

mercial properties with sod webworm problems. If we go after grubs, can we also control sod webworm? (West Virginia)

**Solution:** The following recommendations come from Dr. Doug Caldwell, our landscape entomologist and technical advisor:

First, concentrate on the most damaging pest group, the grub species. Your best "window of control" to minimize grub root-feeding damage is in mid-August through September. Most currently registered grubicides will only provide three to six days of effective residual; so if egg-producing adults are still flying, there will be more grubs appearing later after your grubicide has worn off.

Don't make your application too early in this window of control if you have sold just one application. In heavy grub years, two applications may be needed.

Now, overlay the windows of control for the sod webworm species in your area. This gets complex—there are at least 14 species of sod webworms.

The three most troublesome in turf have two to three generations per year. These species have fairly similar lifecycles with three larval peaks: (1) from mid-June to early August and (2) again in late August through September. They overwinter as larvae. If numerous, or if you are dealing with a previously untreated property, sod webworms could cause damage from March through April; this is the third window of control. However, usually grass is growing rapidly due to spring rains and damage is outgrown.

Sevin will control grubs and sod webworm larvae, but there is only about six days residual. You may get some of the sod webworms of the last generation with your mid-August through September treatment, but monitor for larval population peaks; don't count on being lucky.

The first summer generation of sod webworms (mid-June to early August) may require a separate application. Do not make pesticide applications without finding the sod webworm larvae and determine how vigorously the turf is growing.

Unnecessary pesticide applications can severely reduce predator insects, spiders and mites, which can reduce sod webworm populations by as much as 75 percent. Follow local cooperative extension newsletters that monitor and predict the development of these pests.

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*Dr. Balakrishna Rao is Manager of Research and Technical Development for the Davey Tree Co., Kent, Ohio.*

*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.*