Effectiveness of Fungicides for Control of Lawn Diseases by Home Gardeners
(especially for control of gray leaf spot disease in St. Augustine lawns)
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The following questions were asked by Leon County Extension Agent, David Marshall, to UF-IFAS Extension Plant Pathologist, Phil Harmon:

"I have some questions regarding the effectiveness of granular lawn fungicides such as Scotts Lawn Fungus Control, which contains thiophanate-methyl, and Bayer Advanced Lawn Fungus Control which contains triadimefon, compared to liquid materials such as Fertilome Liquid Fungicide (containing chlorothalonil), which is still on some shelves with a legal lawn label. Specifically, for gray leaf spot, which of the two, the Scotts (thiophanate-methyl) or the Fertilome (chlorothalonil), is likely to be more effective?

Do the thiophanate-methyl and the triadimefon have any systemic action?

Also, I have heard some feedback from nursery personnel that customers are saying the propiconazole-containing products, such as Fertilome Systemic Fungicide, are not working that well on gray leaf spot.

Any enlightenment you can give me on these subjects would be appreciated."

Dr. Harmon's reply:

"I haven't seen much work with the granular fungicides for gray leaf spot management. I would think that these granular formulations would work better on patch type diseases (such as brown patch) than the foliar diseases like Gray Leaf Spot, however both thiophanate methyl and triadimefon have systemic properties.

Regardless of which formulation is used, proper coverage and correct application method, timing, and rates are crucial if any benefit is to come from the application. Turfgrass sprays are difficult to administer by the average homeowner, especially if they are using a hand sprayer. Granular applications are almost as difficult to apply correctly. I personally like the hose end applicator formulations for homeowners. Green Light company has a few. Applications will have to be repeated and those made curatively (after heavy infection) will have little success controlling this disease. The best fungicides for gray leaf spot management include thiophanate methyl (mentioned previously) and azoxystrobin (Heritage is available for homeowner use, but is not packaged specifically for homeowners, so a container costs roughly $300).

Chlorothalonil is a protectant fungicide that must be reapplied every 7 to 10 days and is (except in rare cases) not available for homeowner lawn use anymore. It works well when applied with other fungicides, preventatively, and often.

Mancozeb is another protectant fungicide but is not readily available to homeowners. (It also needs frequent applications, like chlorothalonil).

Propiconazole has systemic properties, but gives only moderate to poor control of Gray Leaf Spot during high disease pressure.

Myclobutanil also has systemic properties, and also gives only moderate to poor control of Gray Leaf Spot.
Triadimefon (Bayleton) gives moderate to poor control of Gray Leaf Spot.

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