

# ASK THE EXPERT

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## The one-application blues

**Problem:** How does a company apply a herbicide, insecticide or liquid fertilizer in one application? What confuses us is how the different rates of applications recommended for each product can be mated. For example, a fertilizer might be applied at 15 gal./acre while Sevin should be applied at 50 gal./acre. (New York)

**Solution:** It is confusing and sometimes difficult to manage pests and fertilize lawns in one application. You may have to adjust your fertilizer and/or select different pesticides labeled for the target pests.

The professional applicator refers to the pesticide label for specific information on the product and active ingredient recommended per acre or 1000 sq. ft. In a liquid delivery system, water is the carrier that enables uniform distribution and moves the pesticide to the site of the activity.

Fertilizers are also dissolved or suspended in water for easier application and to decrease soluble salts, thereby minimizing burn potential. The lower the fertilizer's salt index, the less water needed as a carrier. Since burn potential also varies with weather conditions, it may be necessary to adjust either the fertilizer source or amount of water to prevent plant injury—particularly during hot, dry periods.

Most liquid delivery systems for fertilizer and pesticide combinations will apply 3 to 4 gallons of mixture per 1000 sq. ft. of turf area (131 to 174 gallons per acre). Some pesticides may require that the active ingredient be watered in after the application.

If you select a constant rate for your water carrier, be sure to add the proper amount of product to apply the recommended amount of active ingredient. You should also vary the source(s) and amount of fertilizer to adjust for turfgrass needs and weather conditions. Since this is often difficult to determine on your own, you may wish to consult with suppliers, extension personnel or other knowledgeable people.

## On necrotic ring spot

**Problem:** Some of our clients' lawns have large patches of rings of dead grass with green grass in the center. The problem was identified as necrotic ring spot by the lab. How do we manage it? Can it spread? (Michigan)

**Solution:** Patches and rings of dead grass in Kentucky bluegrass lawns may be an indication of necrotic ring spot disease caused by *Leptosphaeria korrae*. The tillers in the affected area will be dead and brown. These patches often have a tuft of healthy grass or weeds in the center. This symptom will look like Fusarium blight disease or a "frog-eye" appearance. Affected areas may range from a few inches to one or two feet (or larger) in diameter.

Visible symptoms usually appear in April to July and again in September and October. Symptoms may not be apparent during the hottest part of the summer.

Prior identification of patch diseases is important in managing

them. Field diagnosis is difficult. Often, black mycelial strands may be found on the tillers, suggesting the possibility of the disease. To be sure, laboratory confirmation is important, but the lab may take two to three months to induce fruiting bodies. In the meantime, the problem may get worse.

Good cultural practices can help minimize necrotic ring spot:

- 1) Manage thatch.
- 2) Water deeply and infrequently, preferably in early morning.
- 3) Avoid high nitrogen fertilization.
- 4) Follow good mowing practices. Avoid mowing shorter than 2½ to 3 inches.
- 5) Overseed with perennial ryegrass in the fall.
- 6) If the problem persists, consider applying fungicides such as Rubigan or Banner in April and September.

Through aerification equipment, some of the soil cores from a diseased lawn can spread the fungal disease agent to another lawn. However, the new lawn may or may not get the disease, if the new lawn's turfgrass cultivars are resistant or are maintained under a good plant health care program.

Remember that you need a causal agent, a susceptible host and favorable growing conditions for a disease to occur. Since aerification could introduce the causal agent, consider cleaning the aerator's tines between lawns to minimize the potential of spreading the disease.

Integrate both cultural and fungicidal programs to help manage necrotic ring spot. Read and follow label specifications for better results.

## Dogs: keep away

**Problem:** Are there products which can be applied to people to repel dogs? (Pennsylvania)

**Solution:** I am not familiar with any such product. Perhaps some of our readers will respond to this question.

In the meantime, you may want to try repellents that you spray on the dog like "Halt" dog repellent, manufactured by ARI in Griffin, Ga. It contains capsaicin, an alkaloid extract from several varieties of red pepper.

Another alternative is to use a portable unit that emits high frequency ultrasonic sound inaudible to humans. One product called the "Dazer" advertises that it will immediately stop aggressive dogs within 15 feet of you.

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**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.**