

# PROBLEM MANAGEMENT

by Balakrishna Rao, Ph.D.

## Controlling angleworms

**Problem:** How do you get rid of angleworms (earthworms) in bentgrass? When lead arsenate was legal it worked fairly well and one other chemical I tried didn't work at all. I hope you have a solution for killing angleworm without killing the bentgrass. (Wisconsin)

**Solution:** Angleworms (earthworms) are considered to be beneficial and generally no control is needed or recommended. If the population is very high, their castings, seen as mounds of soil on turf, may not be aesthetically pleasing. Earthworms can build up in large numbers in moist and soft soil rich in organic matter. Generally, their activity represents a good fertile soil and no chemical treatment is recommended.

Earthworms are hermaphroditic (all have both male and female reproductive organs), but not self-fertile. Because of these features, under moist and good soil conditions they can build up in large numbers. This may present a problem in many close-cut grasses like bentgrass in golf courses. Often raking will take care of the problem.

If the problem is very severe, application of diazinon twice at two-week intervals will provide some control. Check with your county cooperative extension agent about any state regulation concerning earthworm control. Read and follow label specifications for best results.

## Composting clippings

**Problem:** During the growing season, our mowing service generates a lot of grass clippings. We are thinking of composting it. How long should we wait before using the composted clippings in the garden or around landscape plants? (Michigan)

**Solution:** Follow normal procedures for composting and wait for six months to a year before using the composted clippings in the garden or around landscape plants. As a precautionary step, you can do a radish seedling bio-assay. Plant a few radish seeds in the composted clippings in the ground or in a container. If the seedling grows without any growth distortion, the composted clippings can be used for any landscape or gardening work.

## Managing moss

**Problem:** We are thinking of doing some no-till renovation using Roundup. The problem is that in a number of our clients' lawns there is a heavy growth of moss. Will the Roundup take care of moss problems? If not, what can be done to manage this? (New York)

**Solution:** During no-till renovation procedure, Roundup can be effectively used to manage most of the undesirable vegetation. Moss plants are not included in the Roundup label and a Monsanto representative indicated that Roundup may not be able to

take care of moss problems.

The first step in managing a moss problem is to identify the primary reasons why moss is growing in a particular location. Infestation of moss is associated with low fertility, poor drainage, too much shade, soil compaction, wet conditions, poor air circulation or a combination of these factors.

Some, but not all, cases of moss growth may be related to acid or alkaline soil conditions. To manage moss problems, identify the cause(s) and provide corrective measures. Ammonium sulfate (10 lbs./1000 sq.ft.) applied on actively growing moss plants has reportedly been effective. Reports indicate that ammonium sulfate can help the turf fill in as the moss thins.

Another material, copper sulfate (3 tbsp. in 5 gal. water/1000 sq.ft.) also can be used to manage moss problems. Make sure to wear protective clothing and gloves. Copper sulfate can stain and is difficult to remove from clothing.

## Cooling fertilizer burn

**Problem:** We are a liquid lawn care company. We have used urea in our program in the past and have had some burn problems. We would like to use some low-burn fertilizers. What can we use? Please make your comments about these sources and their performance in relation to urea. (Pennsylvania)

**Solution:** To deal with fertilizer burn, you could use low-burn nitrogen sources, such as Fluf (18-0-0), a suspension nitrogen source manufactured by W.A. Cleary Chemical Corp; Formolene (30-0-1.6) a liquid nitrogen source from Hawkeye Chemical Co.; or Nitroform (38-0-0) a ureaform fertilizer manufactured by Nor-Am Chemical Co.

Reported research indicates that Kentucky bluegrass treated with spray-applied urea results in better color than bluegrass treated with either Nitroform or Fluf during the spring growing season. However, this trend is reversed by late summer. This means that urea can be used successfully during spring. Then as the temperature increases and soil moisture decreases, incorporate the low-burn potential products.

During the heat of the summer, reduce the amount of urea in the program and replace with low-burn nitrogen. If possible, use only the low-burn potential products. Later in the season, as the temperature begins to decline, the amount of urea can be increased and low-burn potential materials can be reduced or eliminated.



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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.