PROBLEM MANAGEMENT

by Balakrishna Rao, Ph.D

Improving buttonweed control

Problem: We're getting poor control of buttonweed and can't figure out why. Do you have any suggestions? (Virginia)

Solution: The weed you are referring to is probably Virginia buttonweed, not poorjoe. Virginia buttonweed (Diodea virginia) is identified as a weed of lawns in Weeds of Arkansas by L. Baldwin and E.B. Smith. This plant resembles poorjoe (Diodia teres), which is a summer annual. Buttonweed is lisited in the 1976 Scotts Professional Turf Manual as being selectively controlled using Proturf Fertilizer and Dicot Weed Control.

According to field evaluations of post-emergence herbicides for Virginia buttonweed control in turf, one application of Trimec will provide 80 percent control. However, regrowth will occur within 72 days after treatment. This will require treatments as needed.

The best selective treatment would be a herbicide mixture containing 2,4-D and dicamba. Both Trimec and Super Trimec contain these. Make sure that the weeds are up and actively growing. Proper timing, mixing and thorough coverage is also important to obtain good results.

Mixing cash crop and grass

Problem: I wish to seed 180 acres of golf course land with grass and a cash crop of oats, barley, or spring wheat. A representative of a large seed company told me the cash crop will starve out the grass. Do you agree? (Ontario, Canada)

Solution: I agree with the seed company representative. Growing a cereal crop is not compatible with establishing turfgrass. The cereal crops would not only compete with the turfgrass for sunlight, nutrients and water, but would also prevent the turf from being mowed.

Since your alternative objective is to establish a golf course, I would concentrate on cultural practices that encourage turfgrass development.

Those bloomin' magnolias

Problem: We have a client who has a southern magnolia that has never flowered. Can you please explain why. Is there anything we can do to induce flowering? (Georgia)

Solution: Dr. Michael Dirr from the University of Georgia mentioned in his book, Manual of Woody Landscape Plants, that it may take southern magnolia (Magnolia grandiflora) that have been grown from seed as long as 15 to 20 years to flower. Perhaps this may be a contributing factor.

Many plants enter the reproductive cycle after completing vegetative growth. In some situations plants that are exposed to adverse stress tend to produce flowers.

Flowering plants such as magnolias require their basic needs for growth and development. If the growing conditions or post planting care are not adequate, plants may fail to perform to their maximum potential. Review your fertilization, water and pest management procedures to make sure this isn't the case.

Rounding up bentgrass

Problem: After applying Roundup to remove unwanted growth from an area two years ago, we successfully established four varieties of bluegrass there. Recently however, bentgrass has crept back in. What happened and what can we do about it? (Massachusetts)

Solution: The Roundup treatment you applied two years ago might have taken care of a majority of the bentgrass plant parts, such as the stolons and rhizomes, but some may have already grown out of the major areas and into adjacent areas. These parts may have escaped your Roundup application.

Another possibility is re-infestation of bentgrass from other areas such as neighbors' yards or golf

Once introduced into a lawn, bentgrass plants grow aggressively, especially if your cultural practices include short mowing and abundant watering. Evaluate your cultural practices and promote those that favor bluegrass establishment.

Kentucky bluegrass performs well when mowed at 2 to $2^{1}/2$ inches. Generally, one inch of water per week is sufficient for most soils. Sandy soils may require more frequent watering. Therefore, study the soil type and provide water as needed.



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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.