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Foliar vs. Granular Fertilization on Creeping Bentgrass

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Objective

Evaluate the effects of two relatively low nitrogen fertilization rates applied as 100% granular fertilizer, 50% granular + 50% foliar fertilizer, or 100% foliar fertilizer on turfgrass performance of a creeping bentgrass green.

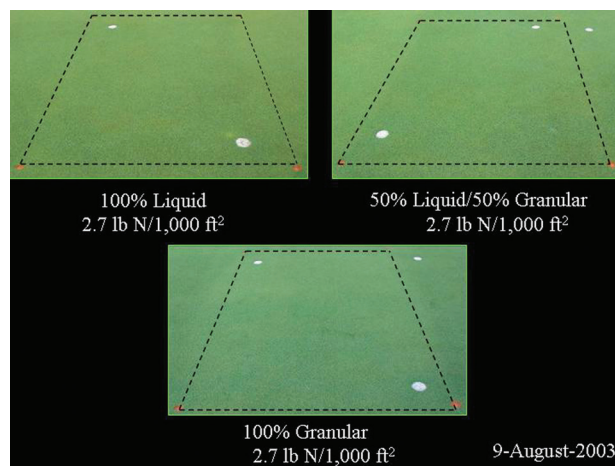
Summary

Superintendents apply nutrients to turfgrass in both granular and foliar forms. There are advantages and disadvantages associated with both forms of fertilizer. It is important to understand how turfgrass performs when fertilized with granular and foliar fertilizer so superintendents can develop effective fertilization programs that utilize the advantages of both forms of fertilizer.

A creeping bentgrass green was fertilized with 2.7 and 3.8 pounds nitrogen/1,000 square feet/year using 100% granular fertilizer, 50% granular + 50% foliar fertilizer, or 100% foliar fertilizer. Turfgrass performance was evaluated over the two-year field study.

Results

- Evaluations of visual turfgrass quality, clipping yield and percent total nitrogen in clippings showed that a rate of at least 3.8 pounds nitrogen/1,000 square feet provided higher creeping bentgrass quality in the transition zone of the U.S.
- Combining both liquid and granular fertilizer application methods appears to provide better results than relying exclusively on one method.



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