


A Promising Topdressing Approach for High-Density Cultivars

James B Beard


A concern in the culture of the new high-density cultivars of both creeping bentgrass (*Agrostis stolonifera*) and dwarf hybrid bermudagrass (*Cynodon dactylon* x *C. transvaalensis*) under very-close mowing heights of 1/8 inch (3.2 mm) or less on putting greens **has been the difficulty in getting topdressing material down into and through the turfgrass canopy.** Now a few superintendents report a new approach that shows promise. Specifically, it involves **topdressing followed by a light/shallow vertical cutting which greatly accentuates the movement of sand topdressing material into the turf canopy.** The higher the topdressing rate applied, the deeper the vertical cutting that should be considered. It also should be indicated that **using sand particles in the lower two-thirds of the USGA particle size distribution range is helpful.**

Comments: When using vertical cutting in combination with topdressing, one should be aware of the potential for added abrasive effects on the grass leaves which could accelerate the occurrence of certain diseases, as the wounds serve as invasion sites for causal pathogens. **For this reason, scheduling the vertical cutting-topdressing combination for periods when disease activity is minimal may prove advisable.** Please note that this technique is in its early phase of development and has shown promise, but it probably will require further use under a diversity of situations to completely understand the proper application and long-term success as a part of a routine cultural program. If you are interested in testing the approach, try it first on a nursery green or the back portion of a large regular putting green. 

ASK DR. BEARD

Q Are there preferred times to schedule foliar feeding applications?

A It should be noted that foliar feeding involves the application of a small amount of nutrients in a quantity of water such that there is no run-off from the leaves. This maximizes uptake of the nutrients primarily through the stomatal openings in the leaves and stems. Since a majority of the foliar applied nutrients are taken up through the stomata, it is best to make the application when the stomata are open. The main prerequisite for stomatal opening is light. The stomata are open only during the daylight hours. A second controlling factor is the potential for internal plant water stress. When the evapotranspiration rate

exceeds the water uptake rate from the roots, a negative internal water stress develops, with one of the first plant responses being closure of the stomata. It is not uncommon for stomatal closure to occur daily at midday during periods of peak evapotranspiration. Thus, it is advisable to avoid foliar feeding applications during this midday period when the potential for stomatal closure is great, especially under conditions of peak evapotranspiration and limited root growth. 

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thread (*Laetisaria fuciformis*) are effectively controlled for 14 or more days at 0.10 to 0.15 oz/1,000 ft²; whereas, the 0.15 to 0.25 oz/1,000 ft² range is preferred for gray leaf spot (*Pyricularia grisea*) management. The higher rate range of 0.20 to 0.25/1,000 ft² is recommended for controlling summer patch (*Magnaporthe poae*) and *Pythium* blight. Rust (*Puccinia* spp.) and *Helminthosporium* leaf spot also are controlled, but Compass ap-

pears to be less effective against snow molds (*Microdochium nivale* and *Typhula* spp.)

Reference

Compass Technical Bulletin. 1999. Novartis Crop Protection, Inc., Turf & Ornamental Products, Greensboro, NC 27419. 