

N/1000 ft² per week. The verticutting regimen began on May 28, 2014. Plots were either assigned a bi-weekly treatment or no treatment. Primo treatments began on June 6, 2014. Plots either received the labeled rate of 0.125 fl oz/1000 ft² every other week or no treatment. The factors that seem to have the greatest impact on turf quality so far, based on visual observations, are nitrogen fertility rate and verticutting regimen. The data has not yet been subjected to statistical analysis, so all observations thus far are subjective.

This study is in its first year of existence and will be replicated for another year after this. Data are being collected based on NDVI Index, chlorophyll content, and visual percent cover. At the end of this year's study the data will be used to determine significant differences and interactions between treatments.

Stop 10. Lightweight Rolling and Topdressing Decrease Fungicide Inputs and Dollar Spot Severity on Fairways

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Dollar spot (*Sclerotinia homoeocarpa* F.T. Bennett) is an extensive turfgrass disease in the upper Midwest that drastically diminishes turf quality and golf course playability—in many cases, results in great expenditures of fungicide products. Michigan State University scientists have observed reduced dollar spot infection in putting greens that were rolled several times weekly. Others have observed a reduction of disease in putting greens that were frequently sand topdressed. Therefore, we hypothesized that dollar spot infection on fairways would be decreased by sand topdressing and by rolling, hence reducing the need for frequent fungicide treatments. Our objective was to evaluate dollar spot severity responses on a mixed stand (*Agrostis stolonifera* L. and *Poa annua* L.) fairway to lightweight rolling and sand topdressing with and without fungicide applications. The study was a split block design with three-replications, and conducted from 2011 to 2014 at the Hancock Turfgrass Research Center at MSU. Treatments consisted of sand topdressing, three rolling frequencies (1x, 3x, and 5x weekly), and controls. In contrast, Emerald® fungicide applications (0.045, 0.09, and 0.180 oz/1000 ft²) at 15-d and 30-d intervals, rolling 3x weekly, sand topdressing, and controls were also started in 2013 and 2014. Infection was visually assessed, and preliminary data suggest that sand topdressing significantly ($P < 0.05$) reduced dollar spot by 40 to 50% at the peak of the disease cycle in 2011 and 2013. Furthermore, the 3x and 5x weekly rolled treatments exhibited 50% less dollar spot injury in 2013. First year data results revealed no interaction effects of sand topdressing and rolling on fungicide efficacy; however, initial results imply that sand topdressing and lightweight rolling could lessen the need for recurrent fungicide inputs for controlling dollar spot on fairways.