Mowing and Rolling Strategies to Manage Anthracnose on Annual Bluegrass Greens

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Objective
Evaluate mowing height, mowing frequency, lightweight rolling and the potential interaction effects on anthracnose severity and green speed of annual bluegrass putting greens.
Summary

Anthracnose has become a common disease on annual bluegrass greens, and to a lesser extent, creeping bentgrass greens. Anthracnose is more severe on stressed turfgrass and cultural practices employed to increase green speed are thought to enhance the disease by increasing stress on the turfgrass plants.

Three mowing heights (0.110, 0.125, 0.141 inch) two mowing frequencies (once or twice daily), and lightweight rolling (rolling every other day or no rolling) in all combinations were imposed on an annual bluegrass putting green maintained using industry standard practices. Anthracnose severity and putting green speed were evaluated at regular intervals throughout the growing season.

Results

- Increasing mowing height by as little as 0.015 inch can reduce anthracnose severity.
- Increasing mowing frequency to twice per day did not increase anthracnose severity.
- Rolling provided a subtle reaction in disease severity under moderate disease pressure and also increased green speed.
- Playability can be maintained by increasing mowing frequency and/or rolling without increasing anthracnose severity.
- A comprehensive management program integrating these practices with moderate nitrogen fertility may reduce the quantity and/or increase the application interval of fungicides required to provide acceptable disease control.

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