

Effect of Bioorganic Turf Amendments on Microbe Populations, Necrotic Ring Spot and Thatch 1988

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Summary

Bioorganic turf amendments were examined for their influence on microbe populations, management of Necrotic Ring Spot (*Leptosphaeria korrae*) and thatch control in each of three different irrigation regimes.

The greatest impact on disease incidence occurred when bioorganic turf amendments were combined with daily irrigation treatments. Turf Restore, Sustane, and Greenspeed were found to have significantly less ring spots than the control in the daily irrigation treatment. When combined with 80% pan irrigation Turf Restore and Sustane had significantly less disease than the untreated control.

Thatch levels were lower for all treatments that received supplemental irrigation as compared to the rain only regime. In the 80% pan irrigation regime Nitroform, Urea, Sustane, Turf Restore and Bio Grounds Keeper had significantly less thatch than the untreated control. No treatment provided significantly less thatch than the untreated control in the daily and the rain only irrigation blocks.

Comparison of plate counts of total thatch bacteria in the untreated control plots of each irrigation regime revealed irrigation treatments supported twice the bacteria populations as 80% pan irrigation and three times the bacteria populations of rain only treatments from early to mid summer. Sustane and Turf Restore combined with daily irrigation treatment had higher populations of thatch bacteria than the untreated control for most of the season. Nitroform combined with daily irrigation supported higher total thatch bacteria populations than the untreated control in late season plate counts. The test plots which averaged high bacteria populations demonstrated reduced disease incidence as well as reduced levels of thatch.

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Turf Restore refers to a Ringer Corporation fertilizer derived from plant and animal bi-products.