



*Photos by W. Uddin*

# Nitrogen Fertility and Anthracnose Basal Rot in Putting Greens

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### Objective

Determine the effects of rate and source of nitrogen application on the severity of anthracnose basal rot on a putting green comprised of annual bluegrass and creeping bentgrass.

## Summary

Basal rot anthracnose is a destructive disease of annual bluegrass and creeping bentgrass and the incidence and severity has increased in recent years. The reasons for the increased problem on greens are not clear.

Three nitrogen sources were applied at three rates every 14 days from April to July to an annual bluegrass/creeping bentgrass putting green. The green was inoculated with anthracnose prior to imposition of nitrogen treatments.

## Results

- A higher rate of nitrogen fertilization significantly reduced anthracnose development in annual bluegrass in a mixed annual bluegrass and creeping bentgrass green.
- Controlled-release nitrogen provided greater suppression of the disease than the quick-release nitrogen.
- Maintaining an adequate level of nitrogen in plants throughout the season is an important component of integrated anthracnose management strategy.



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