

**FATE OF NITROGEN IN KENTUCKY BLUEGRASS TURF**  
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Nitrogen is the most abundant nutrient that managers apply to turfgrass areas. Several possible fates exist for nitrogen in plant systems. These include volatilization, denitrification, plant uptake, and utilization by soil microbes, and leaching. To investigate leaching loss of nitrogen, four intact soil lysimeters have been constructed at the Hancock Turfgrass Research Center in an area of Kentucky bluegrass. Two rates of urea, 2 and 5 lbs. N/1000 ft<sup>2</sup>/year are applied to the area. Water which has percolated through the lysimeter is collected and analyzed for nitrogen content at the Soil Diagnostic Lab at MSU. After two years of data collection, the 5 lb N/1000 ft<sup>2</sup> rate of nitrogen has shown greater concentrations of nitrate in the leached water. However, the percentage of total nitrogen lost in leachate from the 5 lb N/1000 ft<sup>2</sup> rate is similar to that of the 2 lb N/1000 ft<sup>2</sup> rate. Data will be collected for the next several years. This will yield information that can be applied by turf managers to assist in conscientious, sustainable use of nitrogen.