

EFFECTS OF IRRIGATION ON TURF QUALITY AND NECROTIC RING SPOT DEVELOPMENT

M.E. Otto and J. M. Vargas

In 1986 an irrigation study was established on blocks of Baron/Bristol/Victa Kentucky Bluegrass which had been inoculated in late November 1985 and May 1986 with combinations of *Phialophora graminicola* and *Leptosphaeria korrae*, the causal fungi of summer patch and necrotic ring spot (NRS) respectively. The purpose of this study was to test the effects of three different regimes on patch disease development and general turf quality. The three irrigation regimes tested included .1 inch applied daily at noon, 80% of pan evaporation applied twice weekly, and no irrigation. Within each irrigation block are three types of sod which were established in 1984, mineral soil sod, muck soil sod, and seeded.

At this time the non-irrigated blocks show an obvious reduction in turf quality and density. Of the three types of sod the seeded has the best quality rating followed by the muck sod. The mineral soil sod blocks have the poorest density of the three, and in the non-irrigated blocks show signs of dying out similar in symptoms to a patch disease. As of August 15, no symptoms of NRS or summer patch were noted at any of the artificial inoculation sites. Patch disease symptoms did appear on the Fylking Kentucky bluegrass block last September, at points where *Leptosphaeria korrae* inoculum had been placed the previous May.