

## Brown Patch Fungicide Study-1987

Hancock Turfgrass Research Center, MSU, E. Lansing, MI

A replicated fungicide study was established on July 1 on Loretta perennial ryegrass (*Lolium perenne* L.) at the Hancock Turfgrass Research Center on the MSU campus. Treatments were applied to a heavily fertilized and irrigated plot area through July and August on 14 and 21 day schedules. Ratings of the plots were taken on numerous occasions, however, disease development was insufficient to yield meaningful data with the controls never exceeding 2% infection levels.

It was noted that PP523 + X-77 at all concentrations was phytotoxic to the turf after 3 applications (21 day schedule), producing a slower growing, darker green turf. No other phytotoxicity was observed.

## ICI-PP523(SC) Phytotoxicity Studies-1987

Hancock Turfgrass Research Center, MSU, E. Lansing, MI

A phytotoxicity study was conducted at the Hancock Turfgrass Research Center on the MSU campus using PP523(.5SC) at 8 and 16 gm. ai/1000 ft<sup>2</sup> with X-77 surfactant added (.05% v/v). Non-replicated plots (3' x 6') were established on Emerald creeping bentgrass and on Kenblue Kentucky bluegrass. Treatments were applied foliarly with a CO<sub>2</sub> small-plot sprayer at 30 PSI and 48 gal/acre beginning on June 26. Treatments were applied on a 14 day schedule through August 20 for a total of 5 applications (6/26, 7/10, 7/28, 8/7, 8/20).

The creeping bentgrass seemed to be more prone toward phytotoxicity than the Kentucky bluegrass. On July 19, following the second application, moderately severe phytotoxicity appeared on the creeping bentgrass with both rates of PP523(.5SC). The Kentucky bluegrass showed no phytotoxicity on July 19. By the 8/7 application, however, the Kentucky bluegrass was showing moderately severe phytotoxicity on the high rate plots and mild phytotoxicity at the low rate while the creeping bentgrass was now severely burned at both rates. By the last application (8/20) the bentgrass plots and the high rate bluegrass plot were severely burned and this damage remained evident through the rest of the growing season until the turf went dormant. The low rate bluegrass plot exhibited moderate phytotoxicity and recovered by the end of the growing season.