

Pythium Blight (*Pythium* sp.)

Hancock Turfgrass Research Center, E. Lansing, MI.

A preventive study was established on a ryegrass grass stand mowed at 2.5". Four replicate plots measuring 2' x 6' with 1' alleys were set up in a randomized complete block design. Treatments were applied using a CO₂ backpack sprayer with a single 8002E flat fan TeeJet nozzle at 48 GPA and 36 PSI. Treatments were applied on 6/17, 7/1, 7/17, and 7/29. Fertility was maintained at approximately 1 lb actual nitrogen/1000 sq ft/month. Fertility was applied as follows: 6/17 (1/2 lb N), 7/1 (1/4 lb N), 7/18 (1/2 lb N), and 7/29 (1/2 lb N). Chipco 26GT was applied to the entire study on 7/1 to prevent a non-target disease outbreak. The study area was inoculated on 7/24 with *Pythium* sp. growing on a sand/cornmeal mixture using a drop spreader. The ryegrass plots were covered to try to induce disease development. However, no disease developed, and the study was concluded after a second site for Pythium blight was identified.

West Shore Country Club, Grosse Ile, MI.

Two Pythium blight studies, one preventive and one curative, were set up on a creeping bentgrass fairway on a golf course with a long history of Pythium blight. The studies were established in randomized complete block designs, and fertility was applied by the golf course superintendent as needed. Treatments were applied using a CO₂ backpack sprayer with a single 8002E flat fan TeeJet nozzle at 48 GPA and 36 PSI. In the preventive study, plots were 6' x 9' with four replications. Treatment applications were made on 7/29 and 8/11. Disease began to infiltrate the study by 8/11, but the infection was heavily concentrated in one region and did not spread beyond that area, so no data are available from this study.

In the curative study, plots were 6' x 6' with 3 replications. Treatment applications were made on 8/13 after a uniform Pythium blight outbreak. A pre-treatment rating was taken at this time (see Table 4). A disease and phytotoxicity rating were taken on July 18 and are presented in Tables 5 and 6.

As can be seen in Table 5, all treatments provided significant Pythium blight control compared to the untreated check plots. Heritage provided the least amount of control of any of the fungicides tested, significantly less than all treatments tested, except for Vital Sign alone. Quality ratings are presented in Table 6. Slight phytotoxicity was observed in the Vital Sign + Junction plots.