THE EFFECT OF *PYTHIUM ULTIMUM* ON COTTON LINES WITH PARTIAL PYTHIUM RESISTANCE T. A. Wheeler and J. R. Gannaway Texas Agricultural Experiment Station Lubbock, TX

Abstract

Twelve cotton lines which had previously been selected using a petri plate assay for resistance to Pythium ultimum were tested in both artificially and naturally, Pythium infested soil. Paymaster >HS-26' was also included in the tests, both with and without the fungicide seed treatment Apron FL (applied at 0.5 oz/100 lb seed). In two artificially infested tests, the two top varieties were GM 44-98 and GM 52-98, with ranked averages of 2 and 1.25, respectively. PM HS-26 without Apron had an average ranked value of 11.5. In two naturally infested field soils, (one with a high level of Pythium and one with a relatively low level), the top ranked cotton line was GM 49-98 and PM HS-26 + Apron with average ranks of 1.75 and 2.75 respectively. Other lines which ranked high were GM 54-98 and GM 51-98, with average ranks of 5.75. PM HS-26 without Apron ranked an average of 10.75 in these tests.