

Weather-based forecasting on grain-mold disease of sorghum (*Sorghum bicolor*) in Palem

Abstract

Correlation between grain-mold (GM) disease intensity in sorghum [*Sorghum bicolor* (L.) Moench] and different weather factors, viz rainfall, relative humidity (AM, PM and average), air temperature (AM, PM and average) was worked out based on 9-year data (1990-98). Prediction equations were also worked out. Among different weather parameters, the rainfall and relative humidity (AM, PM and the average) were positively and maximum air temperature (Tmax.) negatively correlated with grain-mold (GM) disease intensity. Disease intensity prediction equation for 'CSH 14' was based on relative humidity (AM). For 'CSV 15' it was based on the relative humidity (PM) and the maximum air temperature (Tmax.). The fluctuations in severity of grain-mold (GM) disease intensity were governed mainly by the relative humidity and the maximum air temperature. These 2 factors appeared critical for grain-mold disease of sorghum in Palem area of Andhra Pradesh.

Keywords: Correlation, between grain-mold ,disease intensity ,sorghum [*Sorghum bicolor*].