

Effect of Weather Parameters on the Incidence of Sorghum Stem Borer, *Chilo partellus* (Swinhoe)

J Pranay Bhaskar, S Dhurua, D Anil Kumar and S Govinda Rao

Department of Entomology, Agricultural College, Naira, A. P.

ABSTRACT

Sorghum (*Sorghum bicolor* L. Moench) is one of the world's most significant cereal crops. Sorghum stem borer, *Chilo partellus* (Swinhoe) has been known to be the most serious pest causing grain yield losses. An field experiment was conducted during *rabi*-2022 at Agriculture college farm, Naira to characterize relationship of various meteorological parameters with stem borer incidence in terms of dead heart and white ear heads. The peak incidence of sorghum stem borer was observed with 60.0% DH during 6th and 7th standard week. The correlation studies of (dead hearts) revealed that, there was no rainfall recorded during the period of study, maximum temperature ($r = 0.237$), minimum temperature ($r = 0.248$), morning and evening relative humidity ($r = 0.170$, $r = 0.011$) and showed non significant positive correlation whereas white ear heads in relation to abiotic factor showed that, there was no rainfall recorded during the period of study, maximum temperature ($r = 0.239$), minimum temperature ($r = 0.419$), evening relative humidity ($r = 0.201$) showed non significant positive correlation. Whereas the morning relative humidity ($r = -0.305$) showed non significant negative correlation, respectively.

Keywords: *Correlations, Dead hearts, Regression, Stem borer, Seasonal incidence, Weather parameters.*