

STUDIES ON THE EFFECT OF WEATHER CONDITIONS ON INFESTATION OF MAIZE STEM BORER *CHILO PARTELLUS* SWINEHOE, AND SORGHUM SHOOT FLY, *ATHERIGONA SOCCATA* RONDANI, ON MAIZE, *ZEA MAYS* L.

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Abstract: The present investigation was conducted at Students' Instructional Farm (SIF) of Chandra Shekhar Azad University of Agriculture and Technology Kanpur, (U.P.) during *Kharif*- 2016 and 2017 to study the infestation of maize stem borer and sorghum shoot fly in relation with biotic factors viz. maximum and minimum temperature, relative humidity and rainfall. The incidence of maize stem borer increased gradually and reached to peak with 28.10 per cent and 27.80 per cent infestation in 53 days (33rd SMW) and 53 days (33rd SMW) in *Kharif* season during both the year i.e. 2016 and 2017, respectively. Similarly the formation of dead heart of sorghum shoot fly increased gradually and reached to peak in tune of 22.60 per cent and 20.80 per cent in 34 days (30th SMW) and 34 days (30th SMW) during 2016 and 2017, respectively. The maximum pest population was trapped during 3rd week of August (33rd SMW) in both years, when the maximum temperature i.e. 31.70 °C and 34.30 °C and minimum i.e. 25.50 °C and 26.10 °C, respectively, were recorded and relative humidity of 84.60 per cent and 77.00 per cent, respectively, and total rainfall i.e. 33.10 and 27.80 mm. respectively, were observed. The maize stem borer and sorghum shoot fly incidence in the form of dead heart was correlated with the meteorological parameters of corresponding period of observations.

Keywords: Maize stem borer *Chilo partellus* Swinehoe, Sorghum shoot fly, Seasonal incidence, *Zea mays* L.

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