

INCIDENCE OF SHOOT AND FRUIT BORER, *LEUCINODES ORBONALIS* GUEN. ON BRINJAL IN RELATION TO WEATHER PARAMETERS IN ALLAHABAD REGION

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Abstract: The seasonal incidence of *Leucinodes orbonalis* Guen. (Brinjal Shoot and Fruit Borer) on brinjal was studied at Central Research Farm of the Department of Entomology, Naini Agricultural Institute, SHUATS, Allahabad during 2017. The results revealed that initial incidence of the BSFB on shoot was occurred on the 40th standard week (First week of October) and reached the peak in the 43th standard week (Last week of October - 1st week of November); whereas Initial incidence of the BSFB on fruit was occurred on the 42nd standard week (Third week of October) and reached the peak in the 45th standard week (2nd week of November). BSFB incidence on shoot showed significant positive correlation with Maximum temperature ($r=0.591$) and sun shine hours ($r=0.657$). It was negatively correlated with Evening Relative Humidity ($r=-0.610$). BSFB incidence on fruit showed significant positive correlation with maximum temperature ($r = 0.488$, on number basis and $r = 0.493$, on weight basis) and sun shine hours ($r = 0.641$, on number basis and $r = 0.645$, on weight basis); whereas it had negative correlation with evening relative humidity ($r = -0.650$, on number basis and $r = 0.655$, on weight basis) and evening cloud cover ($r = -0.475$, on number basis and $r = 0.471$, on weight basis). The statistically significant values indicated that occurrence of brinjal shoot and fruit borer was influenced by the prevailing ecological conditions specially Temperature, Relative Humidity, wind speed and sun shine hours. Hence the management of brinjal pest during rabi sown crop under central plain agro-climatic zone should therefore be promoted and tailored from September onwards using an integrated approach.

Keywords: Brinjal, *Leucinodes orbonalis*, Seasonal incidence, Correlation, Weather parameters, Allahabad

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