

SEASONAL INCIDENCE OF MAJOR INSECT PESTS OF BLACKGRAM [*VIGNA MUNGO* (L.) HEPPER] IN RELATION TO ENVIRONMENTAL FACTORS

Manoj Kumar and P. S. Singh*

Department of Entomology and Agricultural Zoology, Banaras Hindu University, Varanasi - 221 005, India

*e-mail : pss_ento@yahoo.co.in

(Accepted 17 May 2016)

ABSTRACT : Field investigation was carried out entitled as, “Seasonal incidence of major insect pests of blackgram [*Vigna mungo* (L.) Hepper] in relation to environmental factors” during ‘Kharif’ season of 2015 at Agriculture Research Farm, Banaras Hindu University, Varanasi, UP. To ascertain the seasonal incidence of *Bemisia tabaci*, *Caliothrips indicus*, *Maruca vitrata*, *Aphis craccivora* and *Empoasca kerri*. The result revealed that the highest mean population of *Bemisia tabaci*, *Empoasca kerri* was recorded maximum 8.33, 2.20 nymphs and adult/cage at 37th and 36th standard week, *Aphis craccivora* 17.60 nymphs and adults/10cm twig, *Caliothrips indicus* 3.33 nymphs and adults/ 10 flower/ plant from each plot at 37th standard week recorded and *Maruca vitrata* 2.27 larvae/plant recorded at 38th standard week respectively. The correlation coefficient of *Bemisia tabaci*, *Empoasca kerri*, *Aphis craccivora*, *Caliothrips indicus* and *Maruca vitrata* was found non significant negatively correlation with maximum temperature, relative humidity (maximum and minimum) and rainfall while, significant negatively correlation coefficient of *Bemisia tabaci* showed with rainfall and The correlation coefficient of *Bemisia tabaci*, *Empoasca kerri*, *Aphis craccivora*, was found significant positively correlation with minimum temperature while *Caliothrips indicus* showed non significant positively correlation and *Maruca vitrata* showed non significant negatively correlation. And sunshine hours showed correlation coefficient of *Empoasca kerri*, *Caliothrips indicus* and *Maruca vitrata* was found significant positively correlation while *Bemisia tabaci* and *Aphis craccivora*, showed non significant positively correlation.

Key words : Environmental factors, population, whitefly, spotted pod borer, nymphs and adults.