

## SEASONAL INCIDENCE OF MAJOR INSECT PESTS OF POTATO CROP IN WESTERN U.P

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**Abstract:** An experiment was carried out under field conditions at the H.R.C of Sardar Vallabhbhai Patel University of Agriculture and technology, Meerut to study the seasonal incidence of major insect pests of potato crop during 2016-17 and 2017-18. The incidence of aphid, leafhopper and whitefly was recorded during 4<sup>th</sup> week of January (3rd meteorological standard week), the peak activity of aphid (13.89 aphid/5 plants), whitefly (15.67 whitefly/5 plants) was observed during last week of November (47<sup>th</sup> meteorological standard week) and the peak activity of leafhopper was observed during first week of December (49<sup>th</sup> meteorological standard week), respectively. The aphid population showed a significant negative correlation with maximum temperature ( $T_{max}$ )  $r = -0.567$ ,  $p < 0.05$ , minimum temperature ( $T_{min}$ )  $r = -0.648$ ,  $p < 0.01$  and with mean temperature ( $T_{mean}$ )  $r = -0.452$ ,  $p < 0.05$ . The whitefly population showed a significant positive correlation with maximum temperature ( $T_{max}$ )  $r = 0.654$ ,  $p < 0.01$  and mean temperature ( $T_{mean}$ )  $r = 0.678$ ,  $p < 0.01$  and minimum temperature ( $T_{min}$ )  $r = 0.569$ ,  $p < 0.01$ . Whereas a significantly negative correlation was observed with evening relative humidity ( $RH_{even}$ )  $r = 0.656$ ,  $p < 0.01$  and mean relative humidity ( $RH_{mean}$ )  $r = 0.686$ ,  $p < 0.01$ . The leafhopper showed a significant negative correlation with minimum temperature ( $r = 0.583$ ,  $p < 0.05$ ) and evening relative humidity ( $r = 0.485$ ,  $p < 0.05$ ).

**Keywords:** Seasonal incidence, Aphid, Leafhopper, Whitefly

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