

Influence of Weather Parameters on the Occurrence of Major Insect Pests and Diseases of Paddy

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ABSTRACT

A bulk plot of 200 sq m. and a light trap was maintained to study the influence of weather parameters on the occurrence of major insect pests and diseases of Paddy in *kharif*, 2014. During the crop season, leaf folder and leaf blast was observed in field and brown planthopper, green leafhopper and adults of leaf folder were appeared in light trap catches. No significant correlation was observed between weather factors studied with brown planthopper catches and leaf folder infestation. However, green leafhopper catches showed a non-significant and negative correlation with maximum temperature ($r = -0.337$) and rainfall ($r = -0.189$) and significant positive correlation with morning ($r = 0.478$) and evening relative humidity ($r = 0.465$). Whereas, the leaf folder adult catches in light trap showed a non-significant negative correlation with maximum temperature ($r = -0.354$), minimum temperature ($r = -0.186$), rainfall ($r = -0.254$) and significant positive correlation with morning relative humidity ($r = 0.486$). Leaf blast incidence showed a significant negative correlation with maximum ($r = -0.560$) and minimum temperature ($r = -0.631$) but, significantly positive correlation ($r = 0.672$) with morning relative humidity.

Key words: *Diseases, Paddy, Occurrence, Pests, Weather parameters.*