

Statistical forewarning models for insect pests and natural enemies of potato in Karnataka during *Rabi* season

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ABSTRACT

An experiment was conducted during *Rabi* 2016-17 and 2017-18 at farmers field of Hagaraki village, Dharwad district, Karnataka state to find out the forewarning models for insect pests and natural enemies of potato. Results revealed that, all the weather factors under consideration had a significant role on population fluctuations of insect pests viz., thrips, leafhoppers, whiteflies and mites while coccinellids and chrysopids with respect to natural enemies. Forecasting model for thrips depicted evening relative humidity at lead time zero (same week of observation) had negative and significant correlation with the incidence of thrips population. Based on prediction model [$Y = -3.23 - 0.208X_2$ (evening relative humidity)] we can forecast thrips population at zero week (during the week of its occurrence) upto 41.80 per cent accuracy. Prediction model [$Y = -2.58 - 0.090X_2$ (evening relative humidity)] for whiteflies at lead time zero showed negative and significant correlation with evening relative humidity with accuracy of 32.10 per cent for whitefly population.

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