

POPULATION DYNAMICS OF GREEN LEAF HOPPER, *NEPHOTETTIX* SPP. AND SPIDERS IN UPLAND TRANSPLANTED RICE AGRO-ECOSYSTEM: A BIO-METEOROLOGICAL INTERACTION STUDY

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Abstract: Rice occupies the prominent place in Indian agriculture. Rice fields are very important and environmental buffers. Field experiment was conducted at research farm of Indira Gandhi Krishi Vishwa Vidyalyaya, Raipur during *kharif* season 2013-14. The maximum population green leaf hopper (GLH) was recorded in 1st week (40 SMW) of October with 53.25 nymph/adult/25 sweeps showed non-significant negative correlation with minimum temperature, average temperature, morning relative humidity, evening relative humidity and average relative humidity while non-significant positive correlation with minimum temperature and sunshine hours in upland transplanted rice agro-ecosystem. The maximum population of spiders were recorded during 4th week (43 SMW) of October with 11.00 adult/25 sweeps and showed significant negative correlation with Rainfall ($r = - 0.656^*$) while positive correlation with maximum temperature and sunshine hours. GLH and spiders populations showed non-significant positive correlation ($r = + 0.230$) at 1% and 5% level of significance in upland transplanted rice agro-ecosystem.

Keywords: Ecosystem, Green leaf hopper, Rice, Upland, Weather parameters

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