

SAFETY OF NOVEL INSECTICIDES TO NATURAL ENEMIES IN BASMATI RICE ECOSYSTEM OF WESTERN UTTAR PRADESH

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Abstract: Field experiments were conducted during *Kharif* 2014 and 2015 at crop research centre, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, U.P., India to evaluate the effect of various novel chemical insecticidal treatments on natural enemies. Altogether, 11 treatments including 9 novel insecticides, viz. (T1) indoxacarb 14.5% SC @ 500 ml, (T2) fipronil 5% SC @ 1000 ml, (T3) novaluron 10% EC @ 600 ml, (T4) cartap hydrochloride 50 % SP @ 1.0 Kg, (T5) cartap hydrochloride 4 GR @ 18 Kg, (T6) spinosad 45 % SC @ 220 ml, (T7) flubendiamide 39.35 % SC @ 75 ml, (T8) chlorantraniliprole 18.5 % SC @ 150 ml and (T9) chlorantraniliprole 0.4 % GR @ 10 Kg besides insecticidal check (T11) chlorpyrifos 50% + cypermethrin 5% EC @ 1200 ml and (T11) untreated control. The results showed that the overall mean population of Spiders was found to be more in the untreated check (2.33 and 3.24/hill) followed by chlorantraniliprole 0.4 % GR (1.85 and 2.09/ hill) in the first and second foliar application. The overall mean population of predators was high in the untreated check (1.94 and 2.90/ hill), followed by chlorantraniliprole 0.4 % GR (1.62 and 2.17/ hill) over the other treatments.

Keywords: Basmati rice, Ecosystem, Insecticides, Uttar Pradesh

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