

Comparative efficacy of newer insecticides against brown planthopper, *Nilaparvata lugens* Stal.

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ABSTRACT

Comparative bioefficacy of few newer insecticides were tested against brown planthopper of rice under greenhouse conditions, IGKV, Raipur during 2013 and 2014. The mean of cumulative mortality during first year clearly indicated that all the insecticidal treatments were significantly superior over untreated control within ten DAT. The highest cumulative mortality (100.00%) of BPH was observed in bifenthrin 10 EC and chlorpyrifos 50 EC + cypermethrin 5 EC. It was followed by fipronil of (98.00%) and minimum (44.00%) in indoxacarb 14.5 SC whereas, during second year, all the insecticidal treatments were also significantly superior over untreated control within ten DAT and similar trend of the maximum cumulative mortality of BPH was noticed in bifenthrin 10 EC and chlorpyrifos 50 EC + cypermethrin 5 EC followed by fipronil of (96.00%) with the minimum (50.00%) in indoxacarb 14.5 SC. On the basis of overall compared the efficacy of different tested insecticides against BPH population of two years mean, revealed bifenthrin 10 EC chlorpyrifos 50 EC + cypermethrin 5 EC to be highly effective (100.00%) with quick knock down effect in controlling BPH whereas, fipronil 5 SC and monocrotophos 36 SL were also effective but it tooks time for getting (97.00%) and (77.00%) control. Descending order of mortality of BPH was observed with different insecticidal treatments as bifenthrin (T_4) < chlorpyrifos + cypermethrin (T_6) < fipronil (T_3) < monocrotophos (T_1) < imidacloprid (T_2) < indoxacarb (T_5) on the basis of all the observations.

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