

Bio-efficacy of novel insecticides and pymetrozine 50% WG against insect pests of paddy

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ABSTRACT

A field experiment was conducted in Randomized Block Design with three replications of eight treatments during *Kharif* season 2014 at Chirori university research centre, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut (U.P.) to evaluate the effect of some novel insecticides against insect pests of paddy. Efficacy of seven insecticides *viz.*, Pymetrozine 50% WG (GSP sample) @ 250, 300 and 400 g/ha, Pymetrozine 50% WG (market sample) @ 300 g/ha, Imidacloprid 17.8% SL @ 125 ml/ha and Fipronil 5% SC @ 1500 ml/ha tested against green leaf hopper (*Nephotettix virescens*), Brown plant hopper (*Nilaparvatalugens*) and White backed plant hopper (*Sogatella furcifera*). The results of the experiment showed that Pymetrozine 50% WG (GSP sample) @ 300 and 400 g/ha and Pymetrozine 50% WG (Market sample) @ 300 g/ha effectively controlled BPH, GLH and WBPH pests followed by Imidacloprid 17.8% SL @ 125 ml/ha and Fipronil 5% SC @ 1500 ml/ha. No phytotoxicity symptoms on paddy crop and no adverse effect on natural enemies were recorded due to application of treatments. Since Pymetrozine 50% WG @ 300 g/ha was equally effective to 400 g/ha dose.

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