

EVALUATION OF EFFICACY OF SOME NOVEL CHEMICAL INSECTICIDES AGAINST STEM BORER, *CHILO PARTELLUS* (SWINHOE) IN MAIZE

Pradeep Kumar, Gaje Singh, Rohit Rana* and Mange Ram

Department of Entomology, Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut, U.P.-250110

*Email : rohitrana.ent@gmail.com

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Abstract: For present studies entitled “Evaluation of efficacy of some novel chemical insecticides against stem borer, *Chilo partellus* (Swinhoe) in maize”, were conducted in randomized block design with three replications of seven treatments during Kharif, 2011 at crop research centre of Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut (U.P.). Among all the treatments the seed treatment with chlorantraniliprole 18.5 SC @4ml/kg seed and one spray @ 350ml/ha was performed best with minimum infestation (4.5 per cent at 25 DAS and 7.42 per cent at 40 DAS), minimum number of dead hearts (2.33 per cent at 25 DAS and 1.66 per cent at 40 DAS) and minimum tunnel length (1.94 cm). The second best treatment was found fipronil 5SC @ 4ml/kg seed and 625ml/ha with infestation (7.84 and 10.27 per cent at 25 and 40 DAS), dead hearts (2.66 per cent at 25 DAS and 2.33 per cent at 40 DAS) and tunnel length (2.41 cm). The maximum infestation (30.45 per cent at 25 DAS and 31.30 per cent at 40 DAS), maximum number of dead hearts (7.33 per cent 25 DAS and 6.33 per cent at 40 DAS) and maximum tunnel length (11.07 cm) per plant was recorded with untreated control during the study. The maximum grain yield of 73.33 q/ha and net profit of Rs. 32714/ha obtained from the treatment of chlorantraniliprole and followed by fipronil. The minimum grain yield of 37.78 q/ha was recorded in untreated control.

Keywords: Stem borer, Novel insecticides, Maize

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*Corresponding Author

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