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RESEARCH ARTICLE

Bio-efficacy of newer insecticides against gram pod borer *Helicoverpa armigera* (Hubner) on chickpea (*Cicer arietinum* L.)

■ S. Patel, V. K. Garg and S. Balpande

SUMMARY

Six insecticides namely Emamectin benzoat 5% SG, Spinetoram 11.7% SC, Spinosad 45.0% SC, Flubendiamide 48 % SC, Chlorantraniliprole 18.5% SC, Novaluron 10% EC were evaluated against Gram Pod Borer (*Helicoverpa armigera* Hubner) larvae. The Gram Pod Borer (GPB) larval population was counted on five randomly selected plants, 24 hrs. before spray and at 3, 7 and 10 days after spray. The two-year experiment was conducted during *Rabi* 2018-19 and 2019-20 at the Rehti Farm of school of agriculture, Mhow, experimental field of Department of Entomology, BRAUSS, (MP). All the Chemical insecticides significantly reduced the GPB larval population. The Pooled GPB population varied from 2.23 to 2.57 larvae/ plant during *Rabi* season at one day prior to first spray. The population was significant lower with, Chlorantraniliprole 18.5% SC, followed by Spinetoram 11.7% SC, Spinosad 45.0% SC, Flubendiamide 48 % SC and Emamectin benzoat 5% SG these five insectiicdes are showing best management effects on the GPB larvae and pod damage .Novaluron 10% EC gave are least effective on larval population and pod damage. The highest chickpea grain yield (19.13q/ha) was obtained with Chlorantraniliprole 18.5% SC.

Key Words : Chickpea, *H. armigera*, Damage, Grain yield, Chlorantraniliprole, Emamectin benzoat, Spinetoram, Spinosad, Flubendiamide, Novaluron

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