

Field efficacy of new generation insecticides for the management of spotted pod borer, *Maruca vitrata* (Fab.) in cowpea

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ABSTRACT

The spotted pod borer, *Maruca vitrata* (Fab.) causes significant damage by attacking pods in cowpea. The aim of this study was to evaluate the field efficacy of new generation insecticides against spotted pod borer. Field experiments were conducted at Regional Research Station, Nasik (Maharashtra) on cowpea during *Kharif*, 2009 and 2010. Among the new generations tested, flubendiamide 20 WG @ 1.0 g/l (4.79%) was observed significantly higher, in reducing the damage caused by the spotted pod borer in cowpea, on number basis followed by indoxacarb 14.5SC @ 0.5 ml/l (7.99%) and spinosad 45 SC @ 0.3 ml/l (8.70%). The highest marketable yield (91.49 q/ha) was recorded in flubendiamide 20 WG @ 1.0 g/l followed by spinosad 45 SC @ 0.3 ml/l (91.39 q/ha). However, the maximum cost benefit ratio (1:3.2) was recorded in thiodicarb 75 WP @ 1 g/l followed by indoxacarb 14.5 SC @ 0.5 ml/l (1:2.3), spinosad 45 SC @ 0.3 ml/l (1:1.9), emamectin benzoate 5 SG @ 0.5 g/l (1:1.3), flubendiamide 20 WG @ 1.0 g/l (1:1.1). On the basis of efficacy, flubendiamide 20 WG @ 1.0 g/l was observed to be very effective against *Maruca vitrata* in cowpea followed by indoxacarb 14.5 SC @ 0.5 ml/l and spinosad 45 SC @ 0.3 ml/l.

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