

Weed Management in Bt. cotton with Sequential Application of Herbicides

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ABSTRACT

A field experiment was carried out for three consecutive years at the research farm of Regional Agricultural Research Station, Lam from *Kharif* 2011 to 2013 with an objective to find out the effective and economic method of weed control in Bt cotton. Results indicated that higher weed control efficiency and more number of bolls per plant and highest seed cotton yield (2495 kg/ha) were obtained with the treatment pendimethalin @ 1.0 kg/ha fb quizalofop ethyl 50g+ pyriproxyfen sodium @ 63 g at 20, 40 and 60 DAS. However, the seed cotton yield observed with the pendimethalin @ 1.0 kg/ha fb Inter culture at 20, 40 and 60 DAS (2394 kg/ha), hand weeding at 20 40 and 60 DAS (2207 kg/ha), and mechanical weeding with power weeder at 20, 40 and 60 DAS (2193 kg/ha) were comparable with that of pendimethalin @ 1.0 kg/ha fb quizalofop ethyl 50g + pyriproxyfen sodium @ 63 g at 20, 40 and 60 DAS (2495 kg/ha). The pooled data of the three years indicates that, the low cost of the herbicidal treatment made the pendimethalin @ 1.0 kg/ha fb quizalofop ethyl 50g+ pyriproxyfen sodium @ 63 g at 20, 40 and 60 DAS was most effective and economical method of controlling weeds of diversified weed flora in cotton as it was indicated in terms of stable and highest seed cotton yield (2495 kg/ha) with higher net returns (Rs 39,245) and benefit cost ratio (2.92).

Key words : Bt.cotton, Herbicides, Sequential application.