

Bio-efficacy of Quizalofop Ethyl on *Echinochloa colona* Control in Rice-Fallow Blackgram

A S Rao

Regional Agricultural Research Station, Lam farm, Guntur 522 034, A.P.

ABSTRACT

A field experiment was conducted during rabi season of 2004-05 to study the bio efficacy of quizalofop ethyl at seven rates (30, 40, 50, 60, 70, 80, and 90 g/ha) on *Echinochloa* spp. control in rice-fallow black gram in comparison with fenoxaprop ethyl 56 g/ha, hand weeding at 15 and 30 days after sowing (DAS) and weedy check in a randomized block design with three replications. Results indicated that Post emergence application of quizalofop ethyl at 30 to 90 g/ha applied at 17 DAS significantly reduced *Echinochloa* spp. growth and increased black gram yield ranging from 19 to 45 percent over weedy check without any crop injury. Among the different doses, quizalofop ethyl at 50 g/ha recorded the highest seed yield (1877 kg/ha), net monetary returns (Rs. 35,625/ha) and B:C ratio of 3.15 and was on par with hand weeding at 15 and 30 DAS, which recorded the highest seed yield of 1928 kg/ha among all the treatments. The unchecked weed growth throughout the crop growing period caused 33 percent reduction in seed yield compared to hand weeding at 15 and 30 DAS.

Key words : Quizalofop ethyl, Rice fallow black gram.