Bio-efficacy of Ethoxysulfuron against Broad- leaved Weeds and Sedges in Transplanted Rice

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ABSTRACT

A field experiment was conducted in clay loam soils of Regional Agricultural Research Station, Warangal during *kharif* 2006 to evaluate the bio-efficacy of ethoxysulfuron 60 WG at three doses (15, 17.5 and 20 g a.i/ha) and 15 WG @ 18.75 g. a.i/ha against broad-leaved and sedge weeds in transplanted rice in comparison with Almix (metsulfuron-methyl 10% + chlorimuron-ethyl 10%) 20 WP @ 2 + 2 g. a.i ha⁻¹ and 2,4-DEE @ 400 g. a. i ha⁻¹. The results indicated that ethoxysulfuron 60 WG at three concentrations and 15 WG, controlled broad leaved weeds and sedges effectively and increased grain yield of rice significantly compared to weedy check. However, the effect of ethoxysulfuron at all the concentrations was on par with other two weedicides and hand weeding at 20 and 40 DAT both in terms of weed control and grain yield of rice crop. Higher net returns and benefit: cost ratio was obtained with ethoxysulfuron 15 WG @ 18.75 g.a.i ha⁻¹ followed by ethoxysulfuron 60 WG @ 17.5 g.a.i ha⁻¹ compared to other herbicides and hand weeding.

Key words : Almix, Bio-efficacy, 2, 4-DEE, Ethoxysulfuron, Weed control efficiency, Weed count, Weed drymatter