



RESEARCH ARTICLE :

Effect of herbicide combinations for management of broad spectrum weed flora in drum seeded rice

■ K. UGALECHUMI, N.K. PRABHAKARAN AND G. MARIAPPAN

ARTICLE CHRONICLE :

Received :

10.07.2017;

Accepted :

23.07.2017

SUMMARY : Rice (*Oryza sativa* L.) is the staple food crop for more than 60% of the world's population. Direct seeded rice is gaining momentum due to high demand of labour during peak season of transplanting and short period of water availability. However, the productivity of rice in India is declining due to an array of biotic and abiotic factors. Weed competition is one of the prime yield-limiting biotic constraints in rice. Weed infestation and competition are severe in puddled direct seeded rice as compare to transplanted rice, because of the simultaneous growth of both crops and weeds. Results of this study indicated that integration of azimsulfuron (35g/ha) with pre emergence application of oxadiargyl 80 g/ha proved better in terms of reducing weed density, dry weight of weeds and increased plant characters, viz., dry matter production, productive tillers and higher grain yield (24%) than hand weeding twice. Among weed management practices the pre emergence application of oxadiargyl 80 g/ha fb azimsulfuron 35 g/ha on 30 DAS was very effective to realize higher weed control efficiency (88.04%), increased productivity and economics (BC ratio 2.80) and it was comparable with oxadiargyl 80 g/ha fb HW on 40 DAS and pretilachlor (S) 450 g/ha fb azimsulfuron 35 g/ha on 30 DAS which recorded BC ratio of 2.56 and 2.54, respectively.

KEY WORDS :

Herbicide combinations, Management of broad, Spectrum weed flora, Drum seeded rice

How to cite this article : Ugalechumi, K., Prabhakaran, N.K. and Mariappan, G. (2017). Effect of herbicide combinations for management of broad spectrum weed flora in drum seeded rice. *Agric. Update*, 12(TECHSEAR-2) : 375-378; DOI: 10.15740/HAS/AU/12.TECHSEAR(2)2017/375-378.

Author for correspondence :

K. UGALECHUMI

Department of
Agronomy, Agricultural
College and Research
Institute (T.N.A.U.),
MADURAI (T.N.) INDIA

See end of the article for
authors' affiliations