EFFECT OF HERBICIDES IN WHEAT AND THEIR RESIDUAL EFFECT ON THE PULSES CROPS

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Abstract: The field experiment conducted at research farm, RARI, Durgapura for two consecutive years during rabi seasons 2013-14 and 2014-15. Results revealed that maximum reduction in weed density at 25 DAS was recorded with pendimethalin pre emergence @ 0.750 kg/ha and at 50 DAS with 2, 4-D ester @ 0.5 kg/ha, clodinafoppropargyl 15 % + metsulfuran methyl 1 % @ 64 g a.i./ha and metsulfuran methyl @ 4 g a.i./ha. All the weed control treatments produced significantly higher grain and straw yield compared to weedy check. Hand weeding, except weed free produced the maximum grain and straw yield of 46.40 and 56.20 q/ha and thus out yielded over rest of the treatment. Being at par with clodinafop-propargyl 15 % + metsulfuran methyl 1 % @ 64 g a.i./ha and sulfosulfuran 75 % +metsulfuran methyl 15 WG @ 32 g a.i./ha, application of clodinafop-propargyl 15 % +metsulfuran methyl 11 % @ 64 g a.i./ha registered an increase of 32.6 and 35.1 per cent in grain and straw yield, respectively over weedy check and thus found as the next superior herbicidal treatment. Further, none of the applied herbicides/mixtures in rabi season (wheat) had residual toxicity on germination of predominant crops (pearl millet, mungbean and clusterbean) grown in kharif season.

Keywords: Weed density, Herbicide mixture, Crop productivity, Wheat, Germination, Succeeding Crops

REFERENCES


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