

Evaluation of herbicides for weed control in irrigated garlic (*Allium sativum* L.) at Samaru, Nigeria

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Abstract

Field trials were carried out during the dry seasons of 1995 and 1996 to identify suitable pre-emergence herbicides for weed control in garlic (*Allium sativum* L.) at Samaru, Nigeria. All the herbicide treatments tested effectively reduced weed infestation compared with the weedy control. Garlic plant height and shoot dry matter were depressed by oxadiazon plus cinosulfuron at 0.75+0.02 kg a.i./ha, oxadiazon plus prosulfuron at both doses and in the weedy check in the two trials. In both years, oxadiazon applied alone at 1.0, 1.5 kg a.i./ha and the mixture of oxadiazon with chloroxuron and prometryne resulted in high garlic bulb yields that were comparable to that of the hoe-weeded control. In both years, the best treatment in terms of garlic bulb yield was oxadiazon plus chloroxuron at 0.75+1.0 kg a.i./ha.

Keywords: Pre-emergence herbicides; Growth; Yield; Garlic; Grass weeds