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EVALUATION OF SOME PRE-EMERGENCE HERBICIDE MIXTURES FOR WEED CONTROL IN CHILLI PEPPER

(Capsicum frutescens L) IN NORTHERN GUINEA SAVANNA OF NIGERIA

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ABSTRACT

Field trials were conducted to evaluate the performance of various pre-emergence herbicide mixtures for weed control in chilli pepper (*Capsicum frutescens* L) at the farm of the Institute for Agricultural Research Samaru during the west seasons in 1993 to 1995. Sixteen herbicide treatments were initially evaluated and compared with the hoe-weeded control and a weedy check in 1993 wet season. Nine of these treatments were further tested and compared with the hoe-weeded control and a weedy check in 1994 and 1995 wet seasons. Selective weed control with consequent high chilli pepper fruit yields compared to the hoe-weeded control were obtained with pre-emergence application of oxadiazon + prometryn; metolachlor + CGA and pendimethalin + terbutryn each at 1.5 + 1.0 kg a.i/ha in 1993 wet season. Similarly pre-emergence application of metolachlor + metobromuron at 1.5 + 1.5 kg a.i/ha and metolaclor + terbutryn at 1.25 + 1.25 kg a.i/ha consistently combined effective weed control with high chili pepper fruit yields comparable to the hoe-weeded control in 1994 and 1995 wet seasons. In this study, unrestricted weed growth throughout the crop life cycle resulted in 81 to 90% reduction in potential chilli pepper fruit yield.