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FLORISTIC COMPOSITION OF PADDY-WEED ECOSYSTEM ON WEED DYNAMICS AND CROP YIELD

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ABSTRACT: The experiment was carried out in transplanted rice crop field during the two consecutive years of 2010 and 2011 to study the weed flora under chemical weed management. Eight dominated weed species were identified affecting the crop. Two weed species, *Alternanthera philoxeroides* (IVI 37.82 and 39.41) and *Cyperus iria* (IVI 37.66 and 38.11) are found to have highest important value index during observation with higher relative frequency, respectively. The application of pyrazosulfuron-ethyl @25ml ha⁻¹ after 10 days as post emergence in transplanted rice showed higher efficacy for controlling the broad spectrum weeds and resulted highest grain yield (6.35 and 6.48 t ha⁻¹) and net monetary returns of Rs. 59700 and 61459 with 65.9 and 68.6% weed control efficiency among all the post emergence herbicides. However, evening and morning time of the post emergence herbicide application found at pad and had significantly superior to afternoon time.

Keywords: Transplanted rice, IVI, WCE, Net returns

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