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Poster

WEED MANAGEMENT PRACTICES ADOPTED BY PADDY FARMERS: A CASE STUDY IN RAJANGANAYA TRACT 09, ANURADHAPURA DISTRICTS

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ABSTRACT

Weeds, affecting both quality and quantity of the production are recognized as the major biotic constraint for rice production in Sri Lanka. This study was conducted to identify the weed controlling practices of paddy cultivation. This study was conducted at Rajanganaya area of Anuradhapura district, Sri Lanka. Thirty farmers were selected for the study. Data were collected using a structured questionnaire as well as collecting detailed information through individual discussions with farmers during the *Yala 2015* season. Weed floral diversity, method of crop establishment, agronomic practices, type of chemical usage and variation of weeds with the fertilizer usage were studied. Descriptive and inferential analysis was done by using *Minitab 15* version statistical software. First Ploughing with a two wheeled tractor followed by second ploughing also with a two wheeled tractor along with leveling with a two wheeled tractor practice was the most common land preparation practice in the area. But, combination of first ploughing with a four wheeled tractor followed by second ploughing with a two wheeled tractor again followed by third ploughing with a two wheeled tractor along with leveling by a two wheeled tractor was also more effective land preparation method in the area. This method was recorded to be the best practice of land preparation which reduces weeds in the field. Therefore, this method can be recommended for the land preparation in this area. Broadcasting was said to be the most popular method in this study area. But machinery planting was

accepted to be the best crop establishment method in the context of weed control. Combination of herbicide + water management + hand weeding could be recommended for this area since this was accepted as the effective combination of post plant practices which control weeds. Use of herbicides more than recommended level had no advantage. Majority of farmers (51%) in the area used straw and chemical fertilizer, but this study revealed that combination of straw + compost + chemical fertilizer was the best practice which indirectly suppressed the weed growth.

Key words: Weed, Herbicides, Land preparation, Fertilizer, Machinery