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PERFORMANCE EVALUATION OF TRACTOR OPERATED ROTAVATOR IN DRY LAND AND WET LAND FIELD CONDITION

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ABSTRACT

Rotavator plays a vital role in helping the farmer to plough their land in a much faster and effective way. An attempt has been made to evaluate the performance of rotavator in dry land wet land condition. Wear analysis of blade was carried out for better life and performance in field. Hence any improvement in the field performance of the same would in turn, augment the productivity in the agricultural sector. From the study it was observed that the wetland operation required one or two passes to get desirable puddling index. The rate of work in dry land operation of rotavator while working in medium black soil was found in range of 0.330-0.350 ha/h where as the depth of operation was found as 9.85-10.21cm in dry land condition. The field efficiency of rotavator was recorded as 77.18-80.60 %. The depth of puddle and puddling index was recorded as 19.68-20.25cm and 78.84-80.63 %, respectively.

KEYWORDS: Rotavator, Puddling Index, Blades, Wear Analysis

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Research Article