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## Performance evaluation of manually operated garlic planter

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■ **ABSTRACT** : The garlic planter comprises, main frame, seed box, metering mechanism, ground wheel with lugs, adjustable furrow opener and seed tube, covering bracket and marker. The field evaluation of manually operated garlic planter was undertaken with objectives *i.e.* to evaluate the field performance, to modify manually operated garlic planter and to study the economics of manually operated garlic planter. The weight of unit without cloves is 12 kg. Two persons are required for operating the planter. One person require for pulling the implement in forward direction and another for direction control. The laboratory and field test was conducted for the evaluation of the planter. The field test was done for calculating the field performance in terms of field efficiency and missing hills percentages. This planter was also tested for cost of operation, and depth of placement of cloves, missed hill percentage and ground wheel slippage. Result shows that the field efficiency was 84.79 per cent. The cost of operation was found to be Rs.1214 /ha, depth of placement of cloves was 4-5 cm. Time required and cost of sowing by planter was effectively less than manual sowing. Yield and returns of planter were found to be more than manual sowing.

■ **KEY WORDS** : Transmission for seed metering device, Missing hills, Field efficiency

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