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# INVESTIGATION OF OPERATING SPEED AND SOIL MOISTURE FOR WORKABILITY OF MINI TRACTOR OPERATED TURMERIC HARVESTER

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## Abstract

In India about 70 % farmers belong to marginal and small category and the turmeric harvesting was done by manual digging and bullock drawn digger. These methods are consuming more labour, time and also involving drudgery in operation. Moreover, higher horsepower tractor mounted turmeric diggers are available, which causes turmeric rhizome damage, soil and not affordable. Hence, mini tractor operated turmeric harvester was developed for small farmers and its performance was evaluated in terms of harvesting efficiency, rhizome damage and field capacity and compared with conventional method. The harvesting efficiency, rhizome damage and field capacity of the mini tractor operated turmeric harvester were found to be 96.17%, 2.13% and 0.25 ha $h^{-1}$, respectively. The saving in cost and time of the turmeric harvester were 42% and 80%, respectively as compared to bullock drawn turmeric harvester.

*Key words:* harvesting efficiency, mini tractor, rhizome damage, turmeric harvester

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