

Performance evaluation of power operated paddy winnower

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■ **ABSTRACT** : Large number of farmers thresh paddy crop manually or by trampling it under feet of animals. Now-a- day's number of progressive farmers are using pedal operated or hold on type threshers which does not have cleaning facility. For cleaning traditional methods such as natural draft of air or small fans are used but it involves drudgery, hence, performance of power operated paddy winnower was evaluated at three different feed rates which was 112, 127 and 138 kg/hr which was developed at CAET Dapoli. The highest cleaning efficiency of 99.3 per cent was found at feed rate of 127 kg/hr for main outlet. The highest output capacity of 117.02 kg/hr was found at feed rate of 138 kg/hr. The percentages of blown grain were 0.21, 0.22 and 0.27 for respective feed rates. The corrected output capacity was 94.64, 109.49 and 114.6 kg/hr for main outlet. The power consumption was in the range of 0.194-0.200 kWh. The cost of operation of power operated paddy winnower was Rs. 30.81/hr.

■ **KEY WORDS** : Power operated paddy winnower, Cleaning efficiency, Output capacity, Energy consumption, Cost of operation

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