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Performance evaluation of pedal operated tree shaker for jamun (Syzygium cumini) tree

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ABSTRACT: The pedal operated tree shaker was constructed and tested on *Jamun* fruit. The tree shaker powered manually by foot pedal. Field evaluation trials of pedal operated tree shaker for harvesting of *Jamun* fruit were carried out on the basis of variation of frequency for shaking of the branch. The studies were also conducted for comparing the cost of operation and saving in the cost over manual harvesting. The field performance test was observed. The average field capacity was 6 trees/day and average shaking efficiency was 79.83% obtained at frequency of 90cpm. The harvesting losses were in the range of 10 to 15 per cent for *Jamun* harvesting. The cost of operation was lesser for pedal operated tree shaker as compared to manual method. The performance evaluation trials indicated the suitability of machine for harvesting of *Jamun*.

Key Words: Jamun, mechanical harvesting, shaking, fruit harvester, fruit catcher.