



## Development and Testing of Rotary Mechanism with Manual Feeding for Husking Coconut

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**Abstract:** Coconut husking is one of the major problems in this sector. A rotary mechanism having a single blade mounted on a segmented ring attached to a main shaft through three spokes was developed. A movable platform for supporting the coconut and feeding it to the rotating blade was also developed. The blade was rotated at a speed of 30 rev/min. The blade pierced the husk on one side of the coconut and ripped open a sector of the husk. Using the twin hand-levers, the movable platform, together with the coconut, were then moved backward. By repeating the operations, the entire husk was removed. The mean husking durations for green and dry coconuts were respectively 24.5 and 26.1 s and maximum durations for husking were respectively 51 and 50 s and the minimum 7 and 12 s, respectively. The number of pieces into which the whole husk of a coconut was split was 4-6 for the green coconuts and 4-7 for the dry ones. During the experiments, none of the green coconuts got mechanically .

**Keywords:** Coconut husking, Rotary mechanism, Tools, Dehusker, Movable platform

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