

## **Comparative performance of automatic cashew nut sheller with manual operated cashew nut cutters**

**S.P. Sonawane, N.J. Thakor, A.A. Sawant and C.R. Wadekar**

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**ABSTRACT** : Cashew nut processing involves roasting/boiling, moisture conditioning, shelling, drying, peeling, grading, and packing. Four types of methods, namely, sun drying, drum roasting, oil bath roasting, and steaming, are adopted by different processing units. Presently, steam cooked and air cured cashew nuts are de-shelled by manually operated cutters. This method of shelling of cashew nuts is not only labour intensive but also hazardous because of corrosiveness of cashew nut shell liquid. Therefore, an automatic (power-operated) cashew nut sheller developed based on the principles of compression and shear are commonly used in the most of cashew processing industries of Konkan Region of Maharashtra. The capacity of the sheller was observed to be 20 kg/h of steamed nuts at a shelling efficiency of 94%. The yields in terms of percent whole, broken and uncut were 96.7%, 1.68% and 5.56 %, respectively.

**Key Words** : Cashew nuts, Shelling, manually operated cutters, Automatic shelling machine.