

Shelling studies for steam treated cashewnuts using an automatic cashew sheller

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■ **ABSTRACT :** The economic interest has made many countries of the world to encourage the cultivation of cashew and it is fast becoming an export produce in many developing countries. The necessary processing operations needed for cashewnut before obtaining the standard exportable quality of edible cashew kernel require lot of time, materials and human resources. This study considers the shelling capacity, shelling efficiency, shelling percentage, broken kernel percentage and wholeness of kernels obtainable by varying the steaming pressure (0.0, 1.0, 1.5, 2.0 and 2.5 kg/cm²) and steaming duration (15, 20, 25, 30 and 35 min). The cashewnuts were steamed in steam cooker and kept in ambient temperature for 20 to 24h for tempering. The dried nuts were shelled using automatic cashew sheller. The automatic cashewnut sheller recorded maximum shelling capacity (18.40 kg per hour), shelling efficiency (80.66 %), shelling percentage (31.74 %), whole kernel recovery (85.47 %) and broken kernel percentage (14.53 %), respectively at 0.0 kg / cm² for 30 min.

■ **KEY WORDS :** Automatic cashew sheller, Cashewnuts, Pretreatment, Shelling parameters

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