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## Utilization of guar gum to improve texture of tamarind squeeze

Rodge A. B and Jadhav B. A. Marathwada Agricultural University, India

Guar gum is natural high molecular weight polysaccharide composed of galactomannan. It is established that endosperm of guar seed contains mainly galactomannan gum. Guar gum is an economical thickener and stabilizer. It hydrates fairly rapidly in cold water to give highly viscous pseudo plastic solutions of generally greater low-shear viscosity when compared with other hydrocolloids. The Tamarind pulp is the richest natural source of tartaric acid (8-18%) and is the chief acidulant used in the preparation of foods in India. Guar gum improves texture of the product. Tamarind Squeeze were prepared by addition of guar gum at various levels I.e. 0.1%, 0.2%, 0.3% and 0.4% .The sensory evaluation of Tamarind Squeeze, were carried out with the help of semi trained panel members using 9 point hedonic scale .The mean score values of sensory evaluation revealed that 0.3 percent of guar gum found to be overall acceptable and enhanced the consistency of Tamarind Squeeze.

rodgeab@yahoo.com

## Development of power operated household brown rice shelling unit

S. Reginold Jebitta, S.I. Jeyanth Allwin and M. Mohamed Taufeeq Department of food processing and engineering, Karunya University, Coimbatore, Tamil Nadu

**B**rown rice (or "hulled rice") is un milled or partially milled rice, a kind of whole natural grain remains unbleached. Brown **D**rice is rich in minerals like magnesium, manganese, fibre, selenium and many other vitamins and hence proved to be highly nutritious than white rice. The bulk amount of brown rice production from a modern rice mill and subsequent storage for months together, causes rancidity due to oxidation and deteriorates its quality. This is the recurring problem in storage of brown rice for longer periods. In order to overcome this difficulty during storage, brown rice should be produced by shelling the paddy at the time of usage at domestic level. Hence a study was proposed to fabricate a power operated house hold brown rice shelling unit. A old burr mill used for roasted coffee bean grinding was taken and modifications were carried out to convert into a suitable power operated brown rice shelling unit. The modifications were done by changing the size of the feed hopper with slide control arrangement to have a controlled uniform flow rate of paddy into the shelling section. Inside the shelling section, the configuration of the shelling discs were altered with different types of materials like plain Teflon, grooved Teflon, plain rubber, grooved rubber, canvas hard sheet and cotton canvas gasket. The performance evaluation tests were conducted to study the shelling characteristics of the newly developed power operated household paddy shelling unit. The canvas cotton gasket material used as stationary disc in the shelling section gave the better result of 29.3 % brown rice production with less brokenness of 1.75 %, compared to other types of disc materials.

## Biography

S.Reginold Jebitta is perusing her Doctoral Degree in the Department of Food Processing And Engineering from Karunya University and worked as an assistant professor in Kongu Engineering college erode. Currently working under the guidance of Dr.M.Ramanathan in the same university.

reginoldjebitta@gmail.com