EFFECT OF SHREDDING APERTURE AND TEMPERATURE OF DRYING ON THE DRYING RATE AND SENSORY PROPERTIES OF MECHANICALLY SHREDDED CASSAVA TUBERS FOR *IGHU* PRODUCTION.

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Cassava is one of the most important crops used for fighting hunger in Africa in general and Nigeria in particular. Its starchy roots are sources of low-cost calories which are processed and consumed in the form of edible starches, meal of retted cassava (fufu); grated, fermented and roasted cassava meal (gari); fermented and non fermented chips and flour and boiled, shredded noodle-like product (*ighu* or *abacha*) to mention a few. Production of shredded noodle-like product, *ighu*, is a time consuming, drudgery-laden process which requires mechanization. Hence research was carried out to determine the effect of shredding with locally fabricated shredder on the drying rate and sensory properties of the cassava shreds.

Cassava tubers were steamed for 25min and shredded in a locally fabricated machine using 3, 6, and 10mm shredding apertures at time of 1800, 3600 and 5400 seconds respectively. The shredded cassava strips were dried in an air oven at 60, 80, and 100°C.

Results show that at an optimum drying rate of 0.0000212g/sec., shred aperture of 10mm and drying temperature of 30°C, the relationship between shred aperture and temperature of drying was linear, with an $R^2$ of 95. Furthermore, sensory analysis showed that shreds obtained using the 6mm aperture was significantly (p<0.05) preferred to the sample obtained from the 3mm and 10mm shredding apertures.

Mechanical shredding of cassava tubers is solicited, as it will free a lot of useful time for rural women, point towards rural development, and provide more opportunities for industrialization in the roots and tuber processing industry.

**Poster presentation**