COMPARATIVE PROPERTIES OF RICE FLAKES PREPARED USING EDGE - RUNNER AND ROLLER FLAKER

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Two types of rice flakes were prepared using edge-runner machine and Roller Flaker, using the paddy variety Jaya. Different grades of flakes were made in these machines. Thickness of edge-runner flakes was 0.82 mm to 1.49 mm and Roller flakes was 0.84 mm to 1.02 mm. Physical and textural properties were studied for both types of flakes in terms of surface area, bulk density, E MC - S, water uptake rate, penetration, viscoelastographic studies and organoleptic characteristics.

Almost similar water uptake and textural properties were found when samples of similar thickness and surface area are compared. In both types of flakes, thin flakes absorbed about 70% water within 15% minutes, thicker flakes took about 30 to 60 minutes to reach this moisture. The edge-runner flakes swelled along thickness and tended to regain the grain structure when soaked in water, Roller flakes appear to increase only in the surface area, thickness does not appreciably increase on soacking. Organoleptic studies showed that there is no significant difference between the two types of flakes when samples of similar surface area were compared.

This study was carried out at C.F.T.R.I., Mysore, India.