

Evaluation of abrasive type rice flour milling machine for its performance

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A study was conducted to evaluate the performance of abrasive type rice flour milling machine (Horizontal abrasive plate mill) currently used in Sri Lanka. The evaluation was done in terms of average particle size milled of rice flour, temperature increase during milling, moisture content of milled rice flour, string continuity on extrusion and cost of production. Comparing the treatments the two passes through the machine has identified as the best treatment, because the average particle size of milled rice flour at two passes was 405 μ m and out of that 40.37 percent of milled rice flour is comply with the particle size (300 μ m) requirement of Sri Lanka standard SLS 913:1991 for rice flour. As well it gives, 246 kg per hour capacity, 35.37 $^{\circ}$ C temperatures of milled rice flour and 3.84 rupees cost of production for processing one kilograms of rice flour and showed the best performances on string continuity test. Hence, this abrasive type plate rice flour mailing machine is suited to the small and medium scale rice flour milling industry in Sri Lanka.

The technology is disseminated by extension mechanism of Institute of Post Harvest Technology and also through consultancy and training. Apart from that, technology is disseminated to farmers through other governmental and non-governmental organization who are working on postharvest technology field.