

A B S T R A C T

Pearl millet, a wonder crop, which can grow well in poor soils under unfavourable weather conditions, has considerable potential in augmenting the cereal production in the drought-prone regions of the world. Presently, the crop is processed in smaller quantities at home/small scale for daily consumptions due to rapid deterioration of milled products viz. grits and flour. Survey of existing post-harvest practices revealed that there is a need to develop a process technology for large-scale milling and utilization of this crop as a food or feed, like other major cereals crops suiting to the requirements and taste habits of the people who consume it as their staple food in the vast regions of Asia and Africa.

Pearling and conditioning treatments were given to the grain prior to milling, in order to ^{attain} differential moisture migration into the grain, which resulted in different size fractions having different fat contents on milling. Process parameters were optimized to produce low-fat grits from the pearl millet. Large scale trials on the commercial mill has been carried out and economics of the developed processing system for 500 kg/h capacity for production of low-fat flour from pearl millet has been worked out.

KEYWORDS

Coarse grits, Conditioning, Fat-rich fraction, Fine grits, Hydration, Low-fat fractions, millet, Pearled grain, Pearling, Pearl millet and Tempering