

Effect of Different Tempering Methods on Sorghum Milling

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Goals:

- To study the effect of tempering on sorghum grain kernel texture
- To study the effect of different tempering methods on the sorghum milling

Recent Publications:

Statement of Problem:

Sorghum is considered a subsistence food resource in tropical areas because of its unique tolerance to drought. Recent studies also found sorghum could be a potential source of gluten-free food for celiac and wheat sensitive consumers. However, lack of commercial sorghum milling facilities and efficient milling techniques has been a hindrance in utilizing sorghum for food purpose. Most current studies on sorghum processing are focused on flaking processes and porridge preparation. Very few studies are available on the effect of tempering on sorghum grain texture and milling characteristics. Proper tempering, before milling, is essential to get high quality flour without lowering percent flour extraction. In addition, moisture distribution inside kernels as dictated by the tempering method could influence milling properties of sorghum. So, the objective of this study is to optimize the sorghum milling process.

Current Activities:

At present, the grain texture and structural characteristics are being evaluated as influenced by tempering method. Tempering methods such as with cold water, hot water, and steam tempering is being studied. Once the tempering method is optimized, the milling characteristics of sorghum will be evaluated.