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### Quality Evaluation of Parboiled Rice with Physical Properties

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This study was undertaken to generate useful information regarding the change of quality of parboiled rice for different processing conditions through the change of physical properties and to search for correlation among the quality indicators. Physical properties, namely, maximum viscosity, hardness of brown rice, hardness and adhesion of cooked rice, volume expansion ratio and solid content were investigated. A first order kinetic model predicted well the effect of processing conditions on the maximum viscosity and hardness of brown rice, indicating the quality index and rate of change of quality with their respective final and reaction rate constant values. The effect of steaming period was found to be greater on the quality indicators of cooked rice, such as adhesion, volume expansion ratio and solid content. Good linear correlation of gelatinization property with the cooking quality and rheological property of parboiled rice was achieved. The positive correlation between adhesion and solid content is assumed to be responsible for producing a less sticky product.

**Keywords:** [quality evaluation](#), [parboiled rice](#), [physical properties](#), [parboiling process](#)



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