

Author: [ADVANCED](#) | Volume Page
 Keyword: |



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > [Abstract](#)

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[\[PDF \(1021K\)\]](#) [\[References\]](#)

Bread-Making Quality of Wheat/Rice Flour Blends

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The bread-making quality of rice flour was evaluated by conducting baking tests using strong wheat flours blended with various quantities of rice flour containing 15% gluten (rice flour). The dough properties and bread qualities obtained from these blends were analyzed. The characteristics of dough and bread changed according to the increase in the blended percentage of rice flour used. The water absorption of blends increased rapidly and the Farinograph characteristics were similar to those of weak flour in that the dough became less pliable and more fragile. The gas retention properties of the dough evaluated using the vacuum expansion method and gassing power after 2 h of fermentation decreased greatly. The appearance and crumb grain of the bread became rough, and the specific loaf volume (SLV) decreased. The upper crust was slightly reddish white, and the crumb grain was somewhat dusty. The sugar and amino acid contents in the bread decreased and the amount of maltose, glutamate, glycine, alanine, and phenylalanine decreased drastically. The texture of the bread was very soft at first, however, the bread rapidly hardened when stored. During the storage, the bread had high cohesiveness and showed high recovery

when compressed.

Keywords: [bread](#), [rice](#), [flour](#), [bread-making quality](#), [blended flour](#)

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