

## Varietal Differences in Physicochemical Properties of Endosperm Mutant Rices Derived from Ilpumbyeo

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The three varieties of endosperm mutant rices derived from Ilpumbyeo were significantly different from original variety, Ilpumbyeo, in physicochemical properties including gelatinization and retrogradation. The appearance of rice mutants showed opaque property and Baegjinju and Goamy 2 were classified into medium-waxy rice and high amylose, respectively. In pasting properties by RVA, compared with Ilpum, breakdown of Baegjinju was higher while setback was lower. On the contrary, the property of Goamybyeo 2 appeared vice versa, which showed Goamy 2 may be undesirable for cooked rice. The degree of retrogradation by DSC and rheometer was in order of Goamy2>Sulgaeng=Ilpum>Baegjinju. Baegjinju and Sulgaeng had high value for adhesiveness of cooked rice. The sensory results showed that Baegjinju had the highest value but Goamy 2 had lowest value ( $P<0.001$ ) for overall test.