

## Changes of A Rice Quality during Storage Period

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### Objectives

Increasing concern about a rice quality, it is considered postharvest technology as well as variety, a region of cultivation as an important factor. Therefore it is necessary optimal drying, storage method found out that did not affected a rice quality. In order to find the optimum storage period of rice, the rice quality was investigated during storage period.

### Materials and Methods

- Materials : Nampyung byeo(2003)
- Rice grain form : milled rice
- Storage condition : room temperature
- Contents of testing : germination rate, amylose, fatty acid, protein, moisture content, mechanic palatability value

### Results and Discussion

- The temperature and humidity of storage bin were greatly changed but those of rice were a little do.
- The germination rate was slowly decreased as the storage period is long.
- The content of moisture was affected by a room temperature, it was increased at stored rice in rainy season(10-Jul~20-Jul).
- As storage period is long, the content of amylose, fatty acid were a just little changed but did not showed a constant tendency to it.
- The content of protein and mechanic palatability value showed a negative correlation because the content of protein was increased and mechanic palatability value was decreased during storage period
- The chromaticity of milled rice showed a range of lightness(L); 75.15~71.75, redness(a); 0.21~0.91, yellowness(b); 16.78~19.28 during storage period.

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Table 1. Changes of germination rate during storage period.

storage period (month)	1	2	3	4	5	6
germination rate (%)	97.3	94.7	94.7	94.0	90.7	90.0

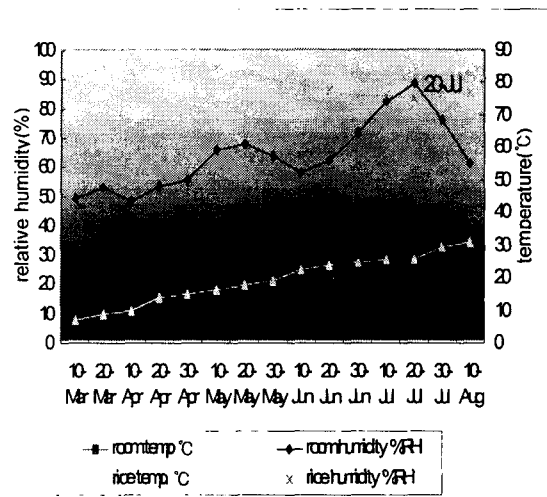


Fig 1. Changes of temperature and relative humidity during storage period

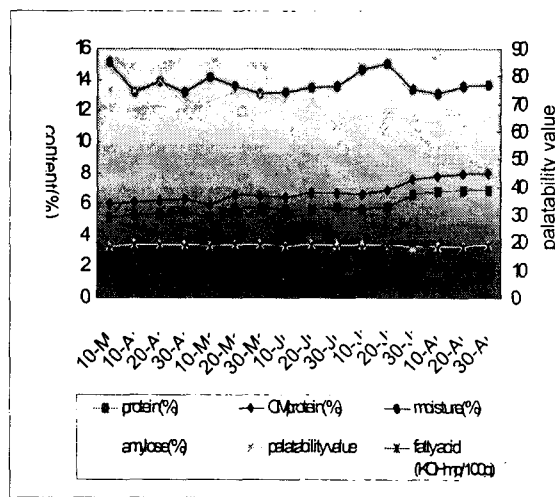


Fig 2. Changes of milled rice quality during storage period

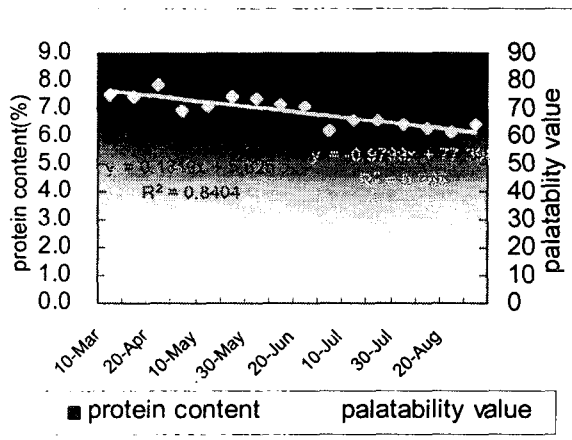


Fig 3. Relationship of protein contents and mechanic palatability value in milled rice

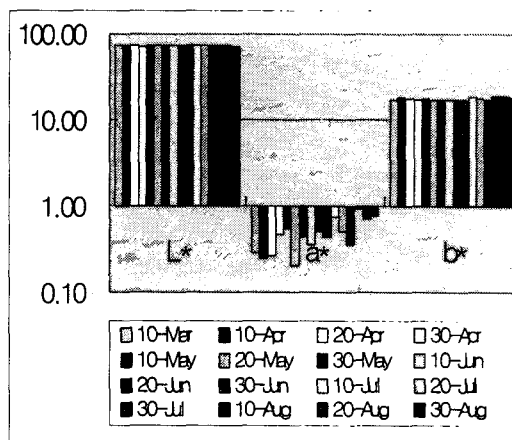


Fig 4. Changes of color in milled rice during storage period