

## **Physico-chemical Characterization of Import Steamed Rice**

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### **Objectives**

- To establish the quality stability of domestic rice (Korean variety)
- To establish the rice distribution system in rice market

### **Materials and Methods**

- Materials : Steamed Rice(Import chinese) and Ilpumbyeo(control)
- Methods : Appearance, Iodine, Texture, RVA paste, panel test

### **Results and Discussion**

- Cracks on the surface of steamed rice due to the drying process
- Irregular grain shape and non-glossy of steamed rice compared to ordinary rice
- Low hardness and low paste properties of steamed rice.
- Various band formation identified by DNA marker analysis of steamed rice

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Table 1. Import quantities of steamed rice by countries. (ton)

| Year    | Total | China | Thailand | Taiwan | America | Australia | Vietnam | Italy |
|---------|-------|-------|----------|--------|---------|-----------|---------|-------|
| 2003    | 8,198 | 7,942 | 18       | 53     | -       | 174       | 8       | 4     |
| 2004    | 9,633 | 9,144 | 338      | 69     | 34      | 32        | 13      | 3     |
| 2005/10 | 8,898 | 8,507 | 357      | 14     | -       | -         | 20      | -     |

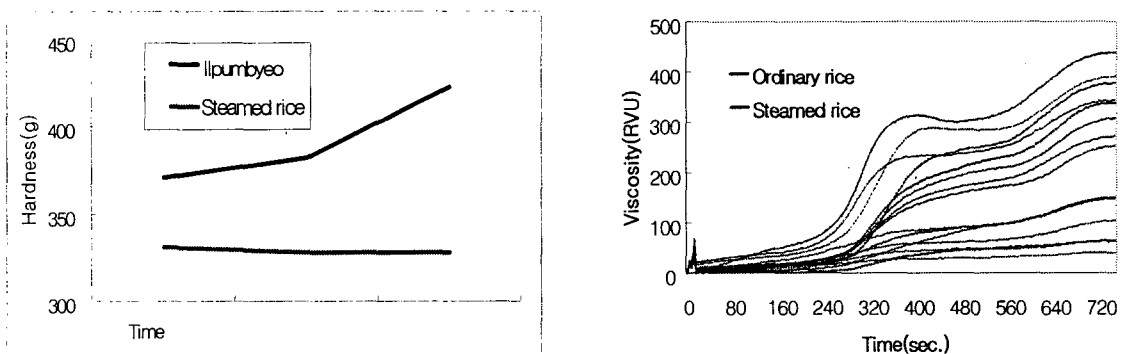


Fig. 1. Characterization of texture and amylogram to steamed rice.

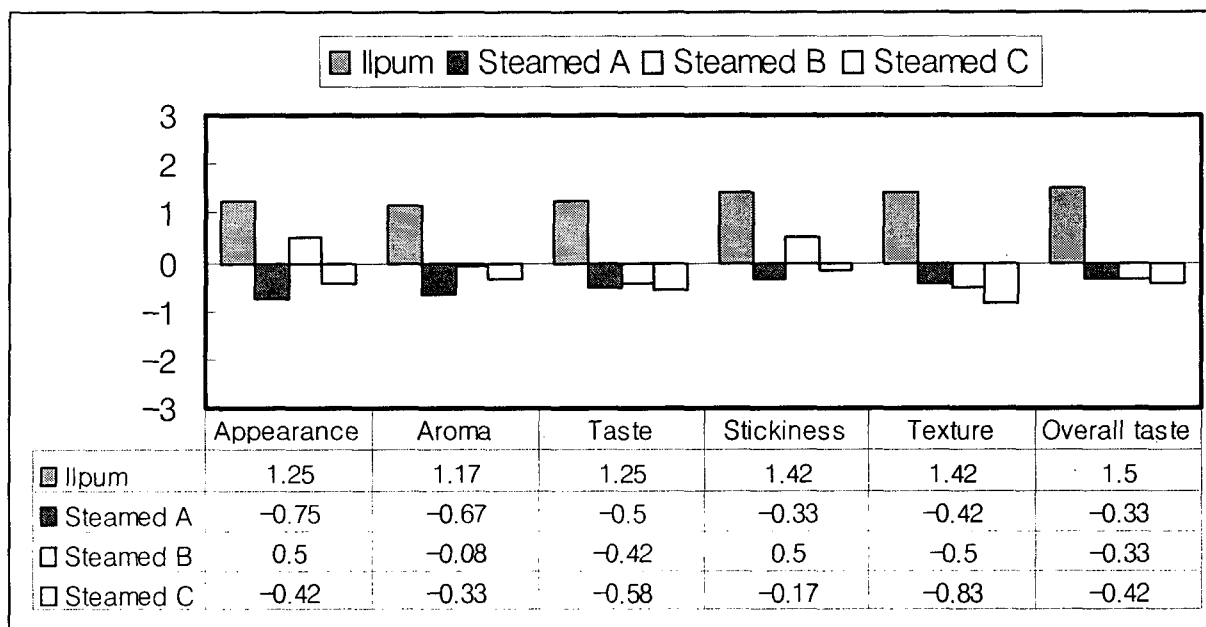


Fig. 2. Characterization of sensory score of cooked rice. (evaluation range : -3R~+3).