

## Ripening Conditions Suitable for Marketing of Winter Squash 'Bochang'

**Authors :** Do Su Park, Sang Jun Park, Cheon Soon Jeong

**Abstract :** This study was performed in order to investigate the optimum ripening conditions for the marketing of Squash. Research sample 'Bochang' was grown at Hongcheonin in Gangwon province in August 2014. Ripening the samples were stored under the conditions of 25°C, 30°C, and 35°C with the humidity RH70 ± 5%. They were checked every 3 days for 21 days. The respiration rate, water loss, hardness, coloration, the contents of soluble solids, starch, total sugar were evaluated after storage. Respiration rate was reduced in all treatments with longer storage period. Water loss was increased in the higher temperature. The 13% water loss was found at 35°C on 21st storage day. The store initially 25°C and 30°C Hardness 47N and the ripening 21 days decreased slightly. On the other hand, in the case of 35°C showed a large reduction than 25°C and 30°C. Soluble solid contents were increased with longer ripening period. 30°C and 35°C was highest ripening 15 days. In the case of 25°C, it was highest on 21th day. The higher the temperature, the higher the soluble solids content are. 25°C and 30°C Coloration was increased rapidly until the ripening 12 days. In case of 35°C, continued increase up to 21 days. 25°C and 30°C showed no differences. Meanwhile, in case of 35°C, appearance quality was reduced in Occurrence of yellowing phenomenon of pericarp occurs from after ripening for 9 days. The coloration of fruit flesh is increase until after ripening for 9 days and decrease from after ripening for 9 days. There was no significant difference depending on the conditions of temperature. The higher the temperature, the lower the content of the starch. In case of 30°C and 35°C, was reduced with longer storage period. 25°C was minimal content change. Total sugar was increased in all treatments with longer storage period. The higher the temperature, the higher the amount of total sugar content is. Therefore, at 25°C for 18-21 days and at 30°C for 12-15 days is suitable for ripening.

**Keywords :** marketing, ripening, temperature, winter squash

**Conference Title :** ICASBFAS 2015 : International Conference on Agricultural Science, Biotechnology, Food and Animal Science

**Conference Location :** Singapore, Singapore

**Conference Dates :** January 08-09, 2015