Changes in Quality of Astringent Persimmons During Ripening by Using Ethylene producing Tablet at Different concentration and Temperature

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Introduction

- The major persimmon producing countries are China, Korea, Japan which contributed for about 95% of world persimmon production.
- Persimmon can be classified as pollination constant non astringent (PCNA) and astringent (PCA), pollination variant non astringent (PVNA) and astringent (PVA).
- Astringent persimmon is one of the most important fruit due to its high economic value in major producing countries.
- Astringency removal is accompanied by conversion of soluble tannins to insoluble tannins, and successful treatments include CO2 and ethylene.

Material and Methods

- Ripening was done at 15°C and 25°C, with 90 ± 5% RH conditions using ethylene producing tablet for six days at 50μL.L⁻¹ and 100μL.L⁻¹ concentration.
- The quality was examined in every 2 days interval.
- The observed parameters were firmness, soluble solids content, color change and water soluble tannin.

Results

- 'Bansi' and 'Daebong' persimmons during ripening at 25°C

Conclusions

- Firmness was decreased as ripening period proceeds on both verities. (Fig 2).
- Glucose content was increased as ripening period proceeds on both verities. (Fig 3).
- The higher temperature the higher was reduction of soluble tannin and the red line shows the point at which astringent persimmon has almost no more astringent taste. (Fig 4).
- Ripening temperature has higher effect on treatment groups than ethylene concentration.