Title Physiological changes of 'Rojo Brillante' persimmon during commercial maturity

Author C. Besada, L. Arnal and A. Salvador

Citation ISHS Acta Horticulturae 833:257-262. 2009.

Keyword stages; harvest; maturity; color; firmness; astringency

Abstract

The aim of this study was to evaluate the changes in physicochemical properties that occur during the period of harvesting 'Rojo Brillante' persimmon. Fruit were harvested at six different stages of commercial maturity using as maturity index the external color. Measurements of firmness, ethylene production, astringency level, acetaldehyde production and total soluble solids and pH were made to correlate with the color evolution thoughout the maturation period. Fruit showed a gradual decrease in firmness and in the level of soluble tannins during maturation, but this reduction was not enough to detect a total loss of astringency from a sensory point of view. All maturity stages offered very low acetaldehyde values and very slight differences in total soluble solids and pH. The evolution in ethylene production reflects the typical climacteric behaviour of this cultivar. The changes in color observed were mainly linked with a decrease in flesh firmness and a reduction in soluble tannins responsible for the astringency.