

The effect of calcium treatments on fruit quality and some physiological disorders on 'Granny Smith' (*Malus domestica* Borkh.) apple cultivar

H. Yıldız, U. Ertürk, C. Yerlikaya

Acta Horticulturae 981: 691-698. 2013.

Abstract

This study was carried out to determinate the effect of CaCl_2 sprays on some physiological and chemical quality parameters (as Fruit Flesh Firmness, Soluble Solid Content, ions) and physiology disorders (as Water Core, Superficial Scald) on 'Granny Smith' apple fruits harvested in 180, 190, 200 and 210 days after full bloom and stored 3 and 6 months under $0\pm 0.5^\circ\text{C}$ temperature and 90-95% relative humidity conditions. Ca applications had no clear effect on water core but they enhanced flesh firmness and SSC of fruits. Harvest date is very effective on superficial scald incidence. Ca applications affected Ca and K contents of fruit, but did not change Mg content. K/Ca and K+Mg/Ca ratios decreased with increase in Ca applications.