Title Controlling post-harvest storage problems in 'Concorde' pear with boron applications

Authors E.A. Mielke, M.H. Chaplin

Citation ISHS Acta Horticulturae 800:571-576 . 2008.

Keywords pear; *Pyrus communis* L.; yield; Brossier; South African rootstocks

Abstract

Production of ‘Concorde’ as a commercial pear cultivar for the Pacific Northwest is steadily increasing. The ‘Comice’ × ‘Conference’ cross, developed in England, has a sweet, intense flavor, is storable slightly longer than ‘Comice’, has an attractive red blush, and is prone to a number of storage disorders. Previous research has indicated that these disorders could be largely eliminated by bloom time, but not preharvest, foliar boron applications. Additionally, bloom-time foliar boron applications have been shown to increase fruit set. Applications of single 1.1 kg/ha Solubor at scale separation, full white, first bloom or full bloom eliminated approximately 90% of neck blotch, stem browning, and core browning in fruit ripened for 5 days at 20°C following 7 months storage at -1°C. There was no timing effect on treatment effectiveness. Foliar Solubor applications at scale separation and full white significantly increased fruit set both initially (2 week post petal fall) and at harvest. Foliar applications at full bloom did not increase fruit set.