Title Effect of chlorine dioxide on ripening of 'Xiaobai' apricots

Author Mei Zhong, Bin Wu, Ji-De Wang, Jian-Ming Wu and Li-Hui Wei

Citation European Food Research and Technology 223 (6): 791-795. 2006.

Keywords Apricot; Ethylene; Chlorine dioxide; Ripening; Respiration

Abstract

'Xiaobai' apricots were treated with chlorine dioxide at rates of 0, 10, 100, 150, 1000 nl l^{-1} at 25 °C for 10 h. Fruits harvested at two developmental stages were used. The onset of ethylene production was delayed and respiration rate was reduced following ClO_2 treatment. Ethylene production was efficiently inhibited by 1000 nl l^{-1} ClO_2. ClO_2 treatment resulted in less firmness and titratable acidity loss during shelf life at 25 °C. Decay development in apricots was decreased when fruits were treated with ClO_2 after harvest. It is suggested that after harvest, ClO_2 treatment is efficient for extending the shelf life and maintaining the quality of 'Xaobai' apricots.