

Abstract

Postharvest high pressure washing (HPW) cleans and removes scale insects from citrus fruit. Alone it does not control citrus green mold. We evaluated HPW to apply Na_2CO_3 (SBC) to replace SBC- containing soak tanks for green mold control. Fruit were wound-inoculated with *Penicillium digitatum* spores 24 hr prior to treatment. SBC at 18 C applied for 35 s in a tank or by HPW at 2150 kPa (320 psi) was compared. SBC pH was 8.3 and contained 200 $\mu\text{g/ml}$ free NaOCl. Concentration of SBC was 1%, 3%, and 3% (wt/vol) in tests 1, 2, and 3, respectively. Tests had 6 replicates of 60 oranges and 75 lemons each. Fruit were stored for 2 wk at 10 C. Among oranges, HPW or tank treatment were equally effective in all tests. Among lemons, the HPW was slightly inferior, equal, and superior to tank treatment in tests 1, 2, and 3, respectively. HPW with SBC reduced decay from 97% in the controls to a mean of 17 and 20%, for lemons and oranges, respectively. SBC tank treatment reduced it to a mean of 22 and 19%, respectively, among lemons and oranges. SBC can be applied by HPW or soak tanks with equal effectiveness.