

Title The effect of the association of sanitizers and surfactant in the microbiota of the Cantaloupe (*Cucumis melo* L.) melon surface

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Abstract

This work aimed to evaluate the efficiency of 200, 500 and 1000 mg l⁻¹ of free available chlorine (FAC) and 60 mg l⁻¹ of peracetic acid (APA) associated or not with Tween 80 in reducing the mesophilic aerobes, coliforms group and fecal coliforms on cantaloupe melon surface. Also, the action of the organic chloramine in removing the *Salmonella enteritidis* when attached on the melon surface. All treatments reduced significantly ($p < 0.05$) the microbiota analyzed when compared with a water washing, used as control. The treatment with 1000 mg l⁻¹ of organic chloramine with surfactant reduced the mesophilic aerobes ($p < 0.05$) by 4-log cycles, more than the control. Also this chlorine solution was the most efficient in removing *S. enteritidis* after attachment of the microorganisms to the fruit surface, between 1 and 24 h.