EFFECT OF SILICON AND ASCORBIC ACID COATING ON EXTERNAL AND INTERNAL QUALITY OF AVOCADO FRUIT

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External and internal disorders as well as diseases often compromise the quality of avocados on arrival at their shipment destination. To increase the aesthetic value of the fruit various coating materials are currently used by the different avocado industries of the world. Furthermore coatings are used to minimise the potential of disorders occurring. Recent research on silicon indicates that this element plays a vital role in fighting off fungal infections in plants while ascorbic acid as an antioxidant reduces browning in fruit tissue. Experiments were therefore carried out adding silicate and/or ascorbic acid to a hydrocooling water bath. All treatments resulted in a reduction in water loss and a shelf life extension compared to the control. However, the commercial wax outperformed the silicon and ascorbic acid treatments. Furthermore, the carbohydrate status of the fruit was analysed and possible correlations between the treatments and their effect on the shelf life of the fruit and postharvest decay are discussed.