



# EFFECTS OF DELAY TO COOLING AND STORAGE ON POSTHARVEST DECAY OF STRAWBERRY (CV. CHANDLER)

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## Summary

Strawberry is known to be one of the most delicate and perishable fruits. It is usually harvested full ripe, suffering rapid deterioration under inadequate conditions due to gray mold caused by *Botrytis cinerea* and leak caused by *Rhizopus stolonifer* (El-Kazzaz *et al.*, 1983, Luoto, 1984). Prompt removal of field heat and adequate packaging can slow down undesirable quality changes and increase its shelf-life (Arifin *et al.*, 1987, Boyette *et al.*, 1989, Talbot *et al.*, 1991).

The objective of this work was to evaluate the effects of delay to cooling and storage on postharvest decay of fresh harvested strawberries. 'Chandler' strawberry was harvested from an Agricultural Experiment Station, located in the north of Portugal, at Vairão, Vila do Conde. Fruits were previously inoculated with *Botrytis cinerea* and *Rhizopus stolonifer* and then pre-cooled by forced air with minimal delay after harvest or after a delay of 6 hours at 30°C. The fruit temperature was kept at 30°C prior to the start of each experiment to minimize water loss differences. Subjective evaluations were performed after storage during one week at 2°C plus one day at room temperature. Delaying the pre-cooling results in more decayed fruits. This illustrates the importance of rapid pre-cooling and subsequent storage at low temperature for maintenance of an acceptable appearance of strawberries.

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