

Title Study of water transpiration features of sweet pepper using a thermal imaging system and non-destructive quality monitoring during post-harvest storage

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Abstract

Sweet pepper is susceptible to relatively fast quality changes and its quality is influenced strongly by water or mass losses mainly due to transpiration processes during post-harvest. The aim of this study was the investigation of different storage conditions' effect on quality maintenance of pepper using surface thermal imaging, measurement of overall static stiffness and low-mass impact stiffness as non-destructive methods. Post-harvest keeping quality of pepper samples increased and unfavourable quality degradation was prevented under low, non-chilling temperatures together with the use of LDPE-packaging film resulted in high quality and fresh appearance after more than two weeks long storage period.