

Total soluble solids and dry matter of cucumber as indicators of shelf life

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Abstract

The objective of the present study was to show the relationship between total soluble solids (TSS) and dry matter content (DMC) at harvest and of shelf life of cucumber (*Cucumis sativus* L.) cultivars. Two groups of cultivars with different production cycles were studied during two agricultural seasons. Sample cucumbers were stored for 28 d in the dark, at 10 °C, and 85–95 % relative humidity. The DMC, TSS, and commercial quality were determined every seven days. The crop cycle, harvest month, type of cultivar, and storage time affected cucumber DMC and TSS. The TSS content showed a linear relationship with DMC, which was maintained from harvest to senescence. In addition, the values of these two parameters decreased progressively during storage. The DMC and TSS at the time of collection may influence the shelf life of cucumbers, the higher their contents at harvest, the longer the shelf life. Therefore, the TSS and DMC of cucumbers measured at harvest can be used as indicators of cucumber shelf life.