

Title Fresh cut quality change of watermelon accessions during storage in different temperature condition

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Abstract

This research was conducted on different accessions of watermelon that were planted in field to evaluate fresh cut postharvest quality changes. Fruit were harvested at maturity stage and divided to four slices before storing in different temperature condition. Factorial experiment performed in Complete Randomizes Design and temperature treatments included range 0-1 °C, 4-5 °C and 12-13 °C in storage. Fresh cut quality parameters were recorded first day 7th, 14th, 21th days. Results indicated that temperature condition and cultivar type significantly affected fresh cut quality changes. Weight loss, total soluble solid (T.S.S) firmness of head, heart and pericarp, total acidity (TA), represented more variation between accessions and storage condition during storage .Weight loss and TA were increasing throughout storage while firmness of head, heart and pericarp decreased in the samples. Temperature treatment on accession showed that sensory quality in 4 °C conditions was less than other treatments. Fresh weight loss and total acidity increased throughout storage while overall Iranian accessions revealed more stability and quality than hybrid types and temperature that can be suggested for watermelon fresh cut was 4-5 °C.