

Abstract

This study was conducted in Khorasan Agricultural and Natural Resources Research center during 1999-2000 in order to investigate the proper harvest date And the role of corky layer on fruit browning during storage. The treatments were harvest date (1st of October, 11th of October, 21st of October and 31st of October), corky layer on fruit (without corky layer, with corky layer). After (0, 45, 90 and 135 days) storage life, fruit qualitative characteristics (pH, total soluble solids, maturity index, titrable acidity, flesh firmness, browning and weight loss) were registered. A factorial experiment was laid out adopted completely randomized design with 4 replicates. All data were subjected to analysis of variance and Duncan's multiple range tests were used to compare the treatment, means. Results showed that the proper harvest date was 11th of October (191 ±13 days after full bloom and 3089.9±40 heat units), besides presence of corky layer an fruit preserved fruit quality for 135 days. Fruits harvested at this time after 135 days cold storage had the most total soluble solids, total soluble solids / titrable acidity and the least titrable acidity and browning. Regression equation showed that significant factors for predicting harvest date were heat unit, titrable acid and maturity index but the most important factor was heat unit.