

Effect of climatic conditions and harvesting time on quality and storage life of golden delicious apple

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In order to study effect of climatic conditions (altituddes) and harvesting time on the quality and storage life of apples fruits this experiment was conduted at within four different times of harvesting and two altitudes in Oromieh apple orchards two years. Harvested fruits were stored 6 months in 85-90% RH C .

Rate of TSS,PH,TA Firmness and Color of fruits were measured in harvesting time and once per two monthes at the and end of the period , sample were evaluated by panle . The results were statistically analyed by one factor randomized complate block design combined over locations .

The results showed that harvesting date had a significant effect on flesh firmness, TSS(1%) . Linteraction region and harvesting time had a significant effets on PH,TSS and Color(1%). TThe optimum harvesting time was between 142-149 days after full bloom.

Local genotype identification in this regions was based on the morphological characters and 109 characters (vegetative and reproductive) in different growth phases were evaluated such as:

onset of dormancy (leaf abscission), flowering, fruit set and fruit growth phases have been studied. Also flower morphology (size, color, shape,...) leaf characters (height, size,...) and fruit characters (shape, size, color, weight, sugar content, acidity,...) were evaluated. These factors were studied on 1000 quince tree in which similar genotypes during assessment were identified and *eliminated in different processes of study and sampling*. When all characters were evaluated in different growth processes, these characters were analyzed using statistical cluster analysis.

Then, genotypes were classified based on their similarity. Finally, seven different genotypes, MMM1, CC3, BB6, GGGGG, LL9, LL6, Z1, were identified.