

**Title** Internal quality parameters of 12 apple cultivars during storage  
**Author** Abbas Bahari  
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### **Abstract**

The investigations were carried out in one successive season (2007/2008) on 12 apple cultivars obtained from trees on the seedling rootstock, which were 12-15 years old. The apples were picked when their starch index reached the values from 5 to 7. Fruit samples were stored for 6 months in a common cold storage at  $0 \pm 0.5^{\circ}\text{C}$  and 90% relative humidity. At harvest and after 6 months of storage, firmness, titratable acidity (TA) and soluble solids concentration (SSC) and SSC/TA ratio were determined. Apples of the evaluated cultivars significantly differed in firmness and organic components content. After 6 months of storage high firmness, was characteristic for 'Fuji', 'Akhlamad mashad', 'Dir ras mashad', 'Vine sep', 'IRI3' and 'Northeran spy' apples. A high soluble solids content ( $> 15^{\circ}\text{Brix}$ ) was recorded in 'Velthi', 'Bele de boskope' and 'IRI1' and a high titratable acidity ( $>0.6\%$ ) in 'Bele de boskope' apples. The ratio of soluble solids to organic acids increased with storage time. After 6 month of storage a very high value of that ratio was found in 'Prime gold', 'IRI1' and 'Akhlamad mashad' ( $>60$ ) and comparatively low ( $<30$ ) in 'Bele de boskope', 'Granny Smith' and 'Vine sep'.