Title Effect of harvesting time on nut quality of pistachio (*Pistaciavera* L.) cultivars

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Abstract

The appropriate time of harvest is one of the most important factors affecting the quality of pistachio. Cultivars 'Ahmad-Aghaii', 'Kaleh-Ghoochi', 'Ohadi' and 'Badami-Zarand' were evaluated for qualitative indices of nut over a period of four years from 2001 to 2004. Nut samples were collected during eight successive weeks from 23 August to 11 October. Splitting, early splitting, hull cracking and hulling percentage continually increased toward the last harvest week while non-splitting, immaturity, number of nuts per ounce and moisture content decreased during the harvest weeks. The increment of splitting and the number of nuts per ounce was not significant from 20 September to the last week of harvest. Early splitting, hull cracking and aflatoxin contamination of kernel progressively increased from 13 September. Total crude fat and sugar contents showed a peak in the middle of September. The concentration of aflatoxins prior or at maturity stage of selected cultivars was lower than the critical level. In general, the appropriate time of harvest for the cultivars studied is the middle of September to avoid contamination of nuts to aflatoxin and to ensure the nut quality. This study emphasizes different quality indices for determining the optimum harvest time of pistachio crop.