

Determination and Comparison of Trace Elements in Hazelnut Oils Which Are Obtained with Different Methods

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Cold press method is only used for olive oil production with the context of economics. This method results high sensorial and nutritional value of olive oils, so it can be used for production of hazelnut oil and from the point of applicability of this method it is encouraging. Roasting process is used for increasing oil yield from raw material before cold press. However determination of effects of roasting process on the oxidation stability and composition of oils is an important issue. For this purpose, ICP-AES spectrometer was used for determination of trace elements in hazelnut oils obtained from roasted and unroasted hazelnuts by cold press, hazelnut oils sold in market and refined hazelnut oils were investigated and compared each other. Mo, Mn, Fe, Zn, Al, Ca and Mg were found at all samples, where Ni was found at some samples and V, Cr, Cd, Pb, Cu and Co was not found at all samples. Fe was found between 1.10 and 2.37 mg/kg in cold press hazelnut oils and these findings under limits according to relevant Notification in Turkish Food Codex where Fe content were found over limits in hazelnut oils sold in market and refined hazelnut oils.

Key words: Hazelnut oils, Cold Pression, Trace elements