

Title The study of phenolic profiles of raw apricots and apples and their purees by HPLC for the evaluation of apricot nectars and jams authenticity

Author Verica Dragovic-Uzelac, Jasna Pospišil, Branka Levaj and Karmela Delonga

Citation Food Chemistry Volume 91, Issue 2, June 2005, Pages 373-383

Keyword Apricot nectars and jams; Phenolics; HPLC; Authenticity

### Abstract

The possibility of proving the authenticity of apricot nectars and jams has been investigated by using the phenol compound fingerprint. Phenol composition of the raw material (apricots and apples), their purees, apricot nectars and jams (with and without addition the definite shares of apple puree) prepared under laboratory conditions and commercial apricot nectars and jams has been determined by high performance liquid chromatography with the UV-Diode Array detection.

In addition to large number of various phenol compounds contained in an apples, characteristic marker compounds of the dihydrochalcone group (phloretin 2'-xylosylglucoside and phloretin 2'-glucoside), could be determined. By using the mentioned compounds, undeclared apple admixture in the apricot based products could be detected. The cheaper admixture of the apple puree ( $\geq 10\%$ ) in the apricot nectars could be proved by using phloretin 2'-glucoside and phloretin 2'-xylosylglucoside, and only by using phloretin 2'-glucoside if apple puree was added in relatively low level about 5%. The undeclared admixture of apple puree in apricot jams could be detected by both mentioned dihydrochalcones if apple puree was added in level above 20%, and only by phloretin 2'-glucoside if apple puree was added in level about 10%.