Title Major volatile components and sensory characteristics of plum brandies produced from plum cultivars developed in čačak

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Abstract

In Serbia, besides 'Požegača' and autochthonous plum cultivars, some cultivars developed in Čačak are used for the production of plum brandy. 'Čačanska Lepotica' and 'Čačanska Najbolja' are dessert cultivars which are being processed into brandy only in seasons when the demand for fresh fruits on the market is low. 'Čačanska Rodna' is the cultivar with combined properties, and is mainly used for the production of brandy and drying. 'Požegača' (which used to be a standard for brandy production) was most commonly used raw material for the production of premium-quality plum brandy. This paper presents the study of influence of plum cultivars developed in Čačak on the content of some major volatile components and sensory characteristics of plum brandy. Upon removing the stones, fruits of the studied cultivars were processed into plum brandy by the common method. The contents of methanol, 8 higher alcohols, 3 acids, 10 esters, acetaldehyde and benzaldehyde were determined in the produced plum brandies by gas chromatography. Plum brandies made from the above stated cultivars differed in the content of particular components. Methanol content in all brandies was lower than legally permitted. The highest content of higher alcohols, acids and total esters (without ethylacetate and ethyllactate) was found in brandy produced from 'Čačanska Lepotica'. The highest ethylacetate and benzaldehide content was recorded in brandy produced from 'Požegača'. With regard to the sensory characteristics, the brandy made from 'Čačanska Lepotica' was graded highest, whereas brandies produced from cultivars 'Požegača', 'Čačanska Rodna' and 'Čačanska Najbolja' followed.