

Standard and sensory quality of plum brandies produced from top-quality fruits of 'čačanska Rodna'

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Abstract

'Čačanska Rodna' is a plum cultivar with combined properties which is mainly used for drying and producing plum brandy, but is also as the dessert cultivar and for freezing. Fruit weight in this cultivar varies greatly (from less than 20 g to values exceeding 40 g). This fruit property is not considered crucial for assessing quality of plum brandy, therefore training system need not presuppose hard pruning. However, in order to gain top-quality fruits for fresh consumption, drying and freezing (with fruit weight higher than 30 g and even in excess of 40 g) hard pruning in plum orchards is a must. Unfavourable market trends in some years tend to result in lower demand for this cultivar be it fresh or frozen or intended for processing. In such circumstances, high-quality fruits of 'Čačanska Rodna' from hard-pruning orchards are used only as the raw material for plum brandy production. The paper presents the study of quality of plum brandies (chemical composition prescribed by the law regulation and sensory characteristics) produced by the identical technological procedure from high-quality fruits of 'Čačanska Rodna' grown on four different sites. Fruit weight ranged from 31.96 g to 42.11 g. Although chemical composition and assessment of sensory characteristics of produced brandies varied among sites, quality of all produced plum brandies satisfied requirements of the law regulation of Serbia and the EU. By processing high-quality fruits of 'Čačanska Rodna' we obtained brandies with concentrations of methanol (below 5.62 g/L a.a.) and HCN (less than 1 mg/L a.a.) considerably lower than the values prescribed by the law as maximum.