

## Literatura

- Hjelmeland, A.K., Ebeler, S.E. (2015). Glycosidically Bound Volatile Aroma Compounds in Grapes and Wine: A Review. *American Journal of Viticulture and Enology*, 66 (1), 1-11.
- Karoglan-Kontić, J. (2014). Sorte vinove loze otporne na gljivične bolesti. *Gospodarski list* 17, 39-49.
- Robinson, A. L., Boss, P. K., Solomon, P. S., Trengove, R. D., Heyman, H., Ebeler, S. (2014). Origins of Grape and Wine Aroma. Part 1. Chemical Components and Viticultural Impacts. *American Journal of Viticulture and Enology*, 65(1), 1-24.
- Schwab, W., Davidovich-Rikanati, R., Lewinsohn, E. (2008). Biosynthesis of plant-derived flavor compounds. *The Plant Journal*, 54 (1), 712-732.
- Sun, Q., Gates, M.J., Lavin, E.H., Acree, T.E., Sacks, G.L. (2011). Comparison of odor-active compounds in grapes and wines from *Vitis vinifera* and non-foxy American grape species. *Journal of Agricultural and Food Chemistry*, 59, 10657-10664.
- Slegers, A., Angers, P., Ouellet, E., Truchon, T., Pedneault, K. (2015). Volatile compounds from grape skin, juice and wine from five interspecific hybrid grape cultivars grown in Quebec (Canada) for wine production. *Molecules*, 20, 10980-11016.
- Yang, C., Wang, Y., Liang, Z., Fan, P., Benhong, W., Yang, L., Shaohua, L. (2009). Volatile berries evaluated at the germ-plasm level by headspace-SPME with GC-MS. *Food Chemistry*, 114, 1106-1114.

Original scientific paper

### Primary aroma compounds of white cultivars from interspecific hybrids

#### Abstract

Along with a large number of vine cultivars (*Vitis vinifera* L.), today's attention is paid to the possibilities of cultivating interspecific hybrids cultivars with resistance to fungal diseases and abiotic stresses. Intermediate hybrids cultivars were created by crossing the vine cultivars (*Vitis vinifera* L.) and some other species of *Vitis*. Interspecific hybrids often involve the presence of some undesirable aromas (most commonly referred to as foxy or strawberry-like flavorings) originating from the aromatic compounds identified in the earliest generation of interspecific hybrids. Therefore, when evaluating these cultivars, their aromatic profile are of great importance. The study was conducted on 11 cultivars. The analyzed cultivars belong to the crossbreeds created in breeding programs in Hungary, Germany and Serbia: "Bačka", "Bianca", "Johanniter", "Kozmopolita", "Lisa", "Merzling", "Orion", "Phoenix", "Sirius", "Solaris" and "Staufner". In this study, an analysis of the composition of aromatic compounds found in grape skins was carried out. The aromatic profiles of cultivars were determined by gas chromatography-mass spectrometry (GC-MS)

**Keywords:** interspecific hybrids of grape, aroma compounds, primary aroma compounds of grape



**RASADNIK PRUD**  
kvaliteta i povjerenje

Put Narone 124, 20350 Metković  
Tel: +385 20 690 631; 690 632 - Fax: +385 20 690 633  
[www.rasadnik-prud.hr](http://www.rasadnik-prud.hr)