

## **P76 – Resistance breeding in Serbia: SK 13-7/5 is a promising red wine genotype**

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### **Abstract**

Grapevine breeding in Serbia was initiated in the middle of XX century. However, the work on the new cultivars tolerant to main fungal diseases started in 1979. Several white fungus tolerant cultivars were released almost twenty years ago but only two have found their place in the vineyards: 'Backa' (VIVC number 21272) in Serbia and South Hungary, and 'Morava' (VIVC number 23777) in Central Serbia, while the first colored fungus tolerant cultivar 'Dionis' (VIVC number 24064) was released in 2017. High resistance levels from these cultivars, that are the result of different back crossings, now could be combined with high-quality cultivars. 'Tamjanika crna' is an important high-quality cultivar, particularly in East Serbia, but sensitive to downy mildew (*Plasmopara viticola*). The aim of the crossing, performed in 2013, was to improve the tolerance of 'Tamjanika crna' to downy mildew. Tamjanjika crna was chosen as a mother due to its female flowers while the other parent was 'Dionis', which carries *Rpv3* and *Rpv12* genes. Initially, 56 seedlings were obtained but only four reached the final stage. In the paper the results of productive characteristics of the four candidates SK 13-7/1, SK 13-7/2, SK 13-7/5 and SK 13-7/6 are present. The results at harvest were obtained during two seasons in an organic vineyard at the Experimental field for Viticulture, University of Novi Sad. All genotypes were pruned to one cane with 12 buds and one spur with 2 buds and were harvested the same day (13 September on average). The genotype SK 13-7/5 had upward shoot orientation as Tamjanika crna and high tolerance to main fungal diseases as the other parent Dionis. SK 13-7/5 also had two clusters per shoot with 22.8% sugar in the must. This candidate had higher titratable acidity of the must compared to other candidates and Tamjanika crna, which in most of the seasons lose acids quickly just prior the harvest. It seems that SK 13-7/5 genotype has some better characteristics compared to its both parents and could be promoted as a new cultivar.

**Keywords:** *Plasmopara viticola*, 'Tamjanika crna', 'Dionis', 13-7/5, grape quality