



## *Stress-metabolites phytoalexins stilbenoids of vine leaves Shavkapito variety (Vitis vinifera L.) in condition Downy mildew infection*

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### **Abstract**

It is studied Georgian red vine variety Shavkapito healthy and infected leaves by downy mildew (*Plasmopara viticola* Berl.) stilbenoids quantity and qualitative compounds. The samples were taken in east part of Georgia from the soil Eutric cambisols of 15 years of vineyard. Stilbenoids containing fractions were isolated from the objects by ethylacetate. These fractions were processed with appropriate method and were analysed by HPLC/MS. It is established stress-metabolite stilbenoids, among them dominate trans-resveratrol and trans- $\epsilon$ -viniferin. In infected by downy mildew leaves were fixed concentration increase. In concrete, trans-resveratrol from 1,57 mg/kg to 15,23 mg/kg. Trans- $\epsilon$ -viniferin from 10,92 mg/kg to 18,51 mg/kg. The results of the experiment is scientific novelty for the Shavkapito grape variety and is important for establishing in future of the vine immunity correlation with phytoalexins- stilbenoids



### **Biography:**

Marine Bezhuashvili is a Chemist in the Department of Chemistry at IV Javakhishvili Tbilisi State University (1981), is a Candidate of Technical Sciences, Technology of Fermentation Products, Alcoholic and Nonalcoholic Drinks, Georgian Scientific-Research Institute of Horticulture, Viticulture and Wine-making, 1987. She is a Doctor of Technical Sciences, Technology of Wine, Alcoholic and Nonalcoholic Drinks and Mineral Waters; Bioorganic Chemistry Georgian Scientific-Research Institute of Horticulture, Viticulture and Wine-making, 1994. Currently she

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### **Speaker Publications:**

1. Impact of wine technology on the variability of resveratrol and piceids in Saperavi (*Vitis vinifera* L.), DOI: 10.1016/j.aasci.2016.10.002.



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