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PARTICULARITIES OF THE BIOCHEMISTRY OF THE GRAPE BERRIES OF VINE INTER-SPECIFIC HYBRIDS (*V.VINIFERA* L. X *M.ROTUNDIFOLIA* MICHX).

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Abstract. *The morphological and biochemical analysis effected on the grape berries of the vine inter-specific hybrids of 4th backcross (V. vinifera L. x M. rotundifolia Michx.) have shown the concentrations of phenolic substances, resveratrols, pectins etc. are relatively higher than in varieties of the cultivated vine (V. vinifera L.). However, the wild vine (Vitis vinifera subsp. silvestris Gmel.) has much more higher concentrations of phenolic substances, resveratrols, pectins etc. comparatively to those of vine inter-specific hybrids of 4th backcross (V. vinifera L. x M. rotundifolia Michx.).*

Keywords: berry, flavor, taste, resveratrol, pectin, sugars, pH, morphology.

1. Introduction

The morphological and biochemical analysis effected on the grape berries of the vine inter-specific hybrids of 4th backcross (*V. vinifera* L. x *M. rotundifolia* Michx.) have shown the concentrations of phenolic substances, resveratrols, pectins etc. are relatively higher than in varieties of the cultivated vine (*V. vinifera* L.).

However, the wild vine (*Vitis sylvestris* Gmel.) has much more higher concentrations of phenolic substances, resveratrols, pectins etc. comparatively to those of vine inter-specific hybrids of 4th backcross (*V. vinifera* L. x *M. rotundifolia* Michx.).

2. Materials and Methods

The plant material was composed of clusters of grapes and interspecific hybrids of the fourth backcross (*Vitis vinifera* L. x *Muscadinia rotundifolia* Michx.) (hybrids were obtained in the Laboratory of Dendrology Botanical Garden (Institute) of Academy of Sciences of Moldova), of *Muscadinia rotundifolia* Michx., *Vitis vinifera* L. (or vines planted), *Vitis sylvestris* Gmel. (or wild grape or vine wood).

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