

## THE DETERMINATION OF DIFFERENT GROUPS OF PHENOLIC COMPOUNDS OF WINE FROM A NEW RED GRAPES IN CRIMEA

*Aristova N. I.<sup>1</sup>, Chernousova I. V.<sup>1</sup>, Panov D. A.<sup>2</sup>, Zaytsev G. P.<sup>1</sup>, Grishin Yu. V.<sup>1</sup>*

*<sup>1</sup>Government-Financed Establishment of the Republic of the Crimea “National Research Institute for Vine and Wine “Magarach”, Crimea, Russian Federation*

*<sup>2</sup>V. I. Vernadsky Crimean Federal University, Simferopol, Crimea, Russian Federation*

*E-mail: akademik\_n@mail.ru*

In spite of wide recognition of the biologically active properties of grapes, the qualitative and quantitative composition of phenolic compounds has not been sufficiently studied so far. The increase in production and consumption of red wines is promoted by

information on the "French paradox", consisting in the curative effect of wine on human health due to the characteristics of the polyphenolic complex in red table wines.

The aim of the work was to study the qualitative and quantitative composition of various groups of phenolic compounds of wine materials from new red grapes grown in the viticulture of the Crimea.

The material of the research was table wine materials, obtained in the conditions of microprocessing from the technical new red grape varieties of the Republic of Crimea: Krasen, Assol, Bastardo Magarachsky, Antei Magarachsky, Rubin Magarach. As a control sample, the traditional European grape variety Cabernet-Sauvignon was chosen. The identification of the components was made by their retention time. Calculation of the quantitative content of individual components was carried out using calibration curves of the peak area of versus substance.

On the basis of the conducted studies it was revealed that the grape variety Krasen, compared to other varieties under study, is significantly leading in the content of phenolic compounds ( $6162 \text{ mg/dm}^3$ ), followed by the grade Rubin Magarach ( $3296 \text{ mg/dm}^3$ ), then Antey ( $2637 \text{ mg/dm}^3$ ), these values are significantly higher than in the control samples (at 3.5, 1.9, 1.5).

The obtained data of the component composition of phenolic compounds of wine from the new red wine grapes allow an objective assessment of the variety, "Magarach" Institute and recommend them to produce high quality red table wines and other food products the functional areas of improving character, enriched with biologically active compounds, phenolic antioxidant properties in wine-making regions of the Crimea, and close to it on the soil and climatic conditions of other regions of Russia.

**Keywords:** High-performance liquid chromatography, biologically active substances, anthocyanins, phenolic acids, procyanidins, flavonols.

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