

## QUANTIFICATION OF THE CONTENT OF BIOLOGICALLY ACTIVE SUBSTANCES IN NATIVE RM GRAPES VARIETIES

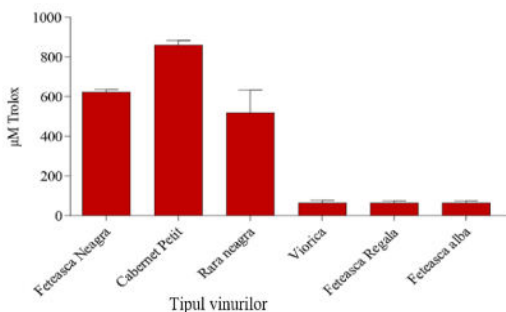
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The originality and typicality of the product present on the market is an important decision factor of consumer in its market choice, therefore it is considered appropriate and necessary to place some wines obtained from local autochthonous varieties specific to the wine-growing areas of the Republic of Moldova, in order to increase the competitive wine production on international markets.

The objective of this study is to highlight the content of biologically active substances in native grapes varieties cultivated in Republic of Moldova. Data collection, showed that in the experimental samples of *Fetească Regală*, the presence of three terpenic compounds (linalool, trionenol and  $\alpha$ -terpineol) was observed in limited quantities between 0.11 and 0.72 mmol/L. The dry red wine produced from the *Feteasca Neagra* variety, SF contents was 792 mg/L, monomers anthocyanins (237 mg/L), 11.5% delphinidin-3-glucoside, 49.3% malvidin-3-glucoside and combined anthocyanins of 34.7 %.



The antioxidant capacity show, in descending order, a maximum for *Cabernet Petit* estimated at 886  $\mu$ M Trolox/ml, followed by *Feteasca Neagră* and similar values between 48 ÷ 59  $\mu$ M Trolox/ml for white wines.

**Figure 1. Antioxidant capacity (assessed by the DPPH radical method) expressed in  $\mu$ M Trolox**

The trichromatic analysis allows to attest the partial oxidation of the pigments in *Feteasca Neagră* due to the grape's pigments and the higher activity of polyphenoloxidases.

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