ECOLOGICAL POTENTIAL OF INTERSPECIFIC RHIZOGENIC GRAPES VARIETES FOR PRODUCTION OF BIODRINKS

Iury SCUTARU[1*], ORCID ID: 0000-0002-9199-5183
Vasile ARHIP[1]
Vasile BOTNARI[2]
Eugen ALEXANDROV[2], ORCID ID: 0000-0003-0077-5802

[1]*Technical University of Moldova, Faculty of Food Technology, Department of Oenology and Chemistry, Chisinau, MD-2045, Republic of Moldova*
[2]*Institute of Genetics, Physiology and Plant Protection of the ASM, Chisinau, MD-2002, Republic of Moldova*

[*]Corresponding author: Scutaru Iury, iurie scutaru@enl.utm.md

Food products, which can be classified as bio products (eco, organic), in recent years enjoy an upward demand not only on international markets, but also in local places. In this context it is important to know the technological potential of some varieties of new grapes collection, made by the Institute of Genetics, Physiology and Plant Protection of the ASM (IGFPP) of the Republic of Moldova, not only for fresh consumption, but also as processing of them. These varieties are valuable due to their tolerance to diseases and pests, minimizing chemical protection, which gives them high ecological qualities that can be approved technologically.

The maturated grapes were harvested in 2021 and 2022 from the collection of the IGFPP. The uvological analysis, processing and laboratory study were carried out at the Department of Oenology and chemistry of the Technical University of Moldova. The essential parameters of musts/wines were determined according to OIV methods. The qualitative and quantitative composition of phenolic substances of grapes and products of them, was investigated by spectrophotometric methods.

The main uvological parameters of rhizogenic interspecific grapes *(Vitis Vinifera L.xMuscadinia Rotundifolia Michx),* homologated in RM were monitored: white--Alexandrina, Augustina, Nistreana, red-Amethyst. The results were correlated with the climatic parameters of the vegetation period of the respective years. In grape juice, such important parameters for the bio raw material as total phenolic substances, flavonoid phenolic substances, cinnamic phenolic substances have been determined. Some representatives of these groups, in addition to the essential role in the structure of grape drinks, their stability, possess important biological properties for the human body. The evolution of the products obtained in the post-processing period was followed.

The targeted varieties showed high resistance against cryptogamic diseases, phylloxera, pest and manifested very positively through productive potential especially in the conditions of 2021, very difficult from the point of view of ensuring phytosanitary protection. It has been demonstrated the possibility of producing bio drinks, with minimal technological interventions during processing. These varieties present an optimistic potential for the production of bio drinks, with high biological and ecological properties.

Key words: rhizogenic varieties, biological protection, bio products, uvological analysis, phenolic substances, flavonoids, cinnamates.

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