

## **ENOLOGICAL POTENTIAL OF NATIVE YEASTS ISOLATED FROM GRAPES IN IASI WINE DISTRICT, ROMANIA**

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### **Abstract**

Spontaneous alcoholic fermentation and the quality of a wines depends on the microbial communities present of the grapes and the external physical variables. Grapevine cultivar, viticultural practices, macro- and microclimatic conditions, and the vineyards geographic location all have an impact on the biological activities of fermenting microorganisms which prevail on the surface of grape berries. The taste and organoleptic features of wines are heavily influenced by the microbial communities present during grape must fermentation. The goal of this study was to isolate and select yeast strains with good enological traits for use as regional starter cultures and, as a result, to generate wines with specific sensory characteristics that can be connected to terroir of Iasi vineyards. After isolation and purification from different grape varieties, in order to determine their ecologically important properties, 9 indigenous yeasts strains were selected and have been tested in the laboratory for rate of fermentation, foam production, capacity to consume sugars from must and alcoholic capacity. After the testing procedures (micro-fermentations at 25°C), 4 yeasts strains (SCZ, SCH, CHC3 and GB3) were retained and could be used as future starters after further tests in large scale fermentations, in order to optimize the fermentation processes and to obtain quality wines from Iași viticultural area.

**Key words:** yeast strains, yeast isolation, enological properties, vineyard Iasi

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