

STUDIUL RELAȚIILOR SPECIILOR DE LEVURI IZOLATE DIN SOLUL VITICOL CU SPECIILE ALTOR MICROORGANISME

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SUMMARY

Each microbial population within a biocoenosis, is the result of some individuals procreation of the same species and at a certain moment cohabit in certain place at a given moment. From the two types of relations which characterize the biotic ecological factors, the interspecific relations has gain a special attention from the researchers (Calvente, V., D. Benuzzi, M. I. S. de Tossatti. 1999) especially regarding the production by the yeasts of some siderophore or phytoalexins with antifungal effects (Fan, Q., S. Tian, 2001, Scherm, B. et al., 2003).

For the isolation and purification of the laboratory mould cultures, there has been used minimal solid medium YPD on which there has been inoculated the spores collected during the yeasts' cell separation stage (endogenous reproduction) or through the inoculation of the articulate-oidium separated from the hyphae. The identification of the different mould species (*Aspergillus* sp., *Penicillium* sp. and *Mucor* sp.) has been through morphological analysis of the developed culture, focusing on the distinct biological elements: the hyphae shape and dimension, and the spores shape and dimension, the structure of the reproduction elements (arthrospores, blastospores, chlamydospores, sterigma, etc.).

The study of the interspecific relations has been made in laboratory conditions, on solid synthetic media distributed on Petri boxes. There has been used complex media, on which there has been inoculated different species of microorganisms (yeasts, moulds and bacteria), isolated from the viticultural area Banu Măracine, from musts and wines.

The study of the antagonistic actions developed between different species, with prejudicial or neutral effects, led to the explicitation of the metabiosis manifested between different species of microorganisms during fermentation. From this point of view, there are two possible directions: the yeasts can consume the entire quantity of nutritional substances without given the possibility for the bacteria to grow; if the bacteria develop faster than the yeasts in a fermentation process, these one can stop the fermentation initiated by the yeasts, as in the case of the lactic bacteria (Popa I.A. și Teodorescu C. Șt., 1990).

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