



Exploration of the Microbiological Diversity of the Albanian Endemic Decorative Plants

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Abstract: In this paper it is presented a microbiological survey of several autochthon plants grown in two Albanian habitats distinguished by respective attitudes. Microbial diversity of plants grown in the mountains is recently an important field of study for the research group of the Department of Industrial Chemistry. This experimental work was realized for the first time in several anatomic parts of the plants of the Botanic Garden of Tirana and it follows other research studies of the microbiology of plants grown in high attitudes, (Dajti Mountain near Tirana - an attitude of about 1000 m above the sea level). This study was focused not only on the investigation of the microorganisms but also on the comparative studies of the same microbial populations offered by different plants, grown in different habitats. A taxonomic test was done after the screening and then it was realized the isolation of yeasts strains with industrial importance and/or with importance for the health and life of human beings, (the possibility to isolate important bio molecules such as fatty acids, pigments, etc). It was obvious that the microbial charges of the same plants grown in the habitats of different attitudes were almost the same, but with a different intensity of growth and different morphological characteristics of the same strains. There were few cases needed to be verified in further studies related to the chemical composition of the plants, which may be the principal factor for the microbiological behaviour as the formation of the spores, colony development increasing and/or inhibition and others.

Keywords: plant habitats, molds, yeasts, mesophilic strains, psychrophilic strains.

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