

THE IDENTIFICATION OF MOLD GROWN ON THE SURFACE AND EPIDERM OF THE WHEAT OBTAINED IN THE CENTRAL REGIONS OF ALBANIA

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ABSTRACT

The purpose of this study is to create a general overview on microbiological characteristics determined on the surface and epiderm of the wheat. The wheat samples were obtained in the central regions of Albania during March- June period, 2015. Microbiological evaluation was done in 4 different media for total bacteria, yeast and mold. The total number of microorganisms grown on the surface of the wheat was determined by the method of placing the suspensions on solid medium. In the case of epiderm, the total number of microorganisms was done by treating wheat kernels with 90ml neutral detergent 0.1 %. Then it was washed four times with 90ml of sterile water. After that, it was thrown clean and sterile sand. In this study was prepared three dilutions with 2 parallels for both cases. After incubation at 26°C (for mold,) and at 30°C (for bacteria), the colonies were counted. The concentration of microorganisms in the original samples was calculated from plates with 25 - 250 colonies. The calculation of total number of microorganisms was done by assuming that each colony grew from a single cell. It was notice that the number of microorganisms grown on the surface was higher than the epiderm. It had some exceptions. A very important point of this study is the identification of mold based on colony growth, cultural and phenotypic characteristics. There was noticed mainly Ascomycete classes especially *Aspergillus spp.* In general, wheat samples which have been analyzed were within standards.

Keywords: Wheat, mold, surface, epiderm.