Izolarea şi selecţionarea de drojdii producătoare de biomasă proteică

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The present paper has as objective studies and researches regarding the multiplication of yeasts on nutritive media in order to produce single cell protein which can be used as food and feed source. In this regard there were isolated and selected several yeast strains from Saccharomyces genera, that were forward been tested, studied and verified under laboratory and pilot conditions, having as objective to identify yeast strains with optimum activity and high multiplication capacity. Using micro-organisms from Saccharomyces genera in order to obtain single cell protein presents advantages such as: - the high content in microbial protein having a similar amino acids profile with this of the animal or vegetal protein; - through the selection the strains having the most appropriate characteristics that we intend to obtain could be performed; - the powerful growth and high biomass resulted; - the micro-organisms can use as carbon organic source a huge
range of raw materials, mainly wastes or by-products resulted from other industries. Verification of the yeast on pilot scale was performed taking into account the industrial process, using as culture medium sugarbeet molasses. Molasses represents one of the main raw materials used for obtaining single cell proteins. The usage of molasses as raw material is convenient mainly because of it's low cost production prices and easy access. The researches will go on in the order to settle the culture media for the multiplication of the selected yeast strains as regards the optimal composition through the microelements, vitamins and bios factors, to compensate the lack of nutritive factors from the processed raw materials.