

ACQUISITION OF SELENIUM-ENRICHED YEAST BASED ON AGRO-INDUSTRIAL RESIDUES

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Introduction

According to recent article published by Molecules Journal, selenium is one of the elements classified into the group of micronutrients indispensable to guarantee the proper functioning of organisms. In addition, over the last few years, many new discoveries come up about selenium potentialities in the animal and human diet, such as its power anticarcinogen.

Considering the important nutritional rule of this component and the need of a production models more and more environmentally-friendly, the present invention describes a production process of selenium enriched yeasts based on agro-industrial residues, such as sugarcane bagasse and rice bran, which serve as carbon and nitrogen sources.

Purposes

This innovative biotechnological production process uses agro-industrial residues as substrate, resulting in a biomass of yeast that contains high selenium levels.

Animals, as know, obtain selenium mainly through the aliments; then, this biomass can be used as a component in the animal nutrition to improve its development, fertility, eggs quality, milk and meat. Furthermore, it can act as component in the prevention of many diseases, for example, cancer.

Application and Target Markets

- Agro industrial, Veterinary and Pharmaceutical Industries.

Development Stage



Image 1: Selenium Enriched Yeast after drying process. Image2: Production of Selenium Enriched Yeast in laboratory scale. Source: Own authorship

Field: Health and Care and Stockbreeding

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