THE PROSPECTS OF APPLICATION OF AMINOPROTEIC EXTRACTS FROM YEASTS OF WINE SEDIMENTS

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Waste recycling contributes to obtaining of valuable products needed for a large number of economical directions. Over the last decade, the intensive study of reutilization of wastes is important. Yeasts from wine production can serve as prime source for food and feed additives with high biological value. Waste of wine production can be used for the production of natural cosmetics.

Taking into consideration the above, the aim of the research was to obtain aminoproteic extracts from the biomass of yeasts from the waste of the wine industry for use in the animal husbandry sector. In the research, the sediments from the production of dry white Rkatsiteli, red Merlot and Cabernet wines, offered by the wine complex «Cricova» SA and taken after the fermentation of the wine, were used.

For this were used some procedures of autolysis such as utilization of glacial acetic acid, homogenization and utilization of phosphate buffer. Depending on the method of autolysis chosen for the study, the following indicators of the biochemical composition of yeast from the obtained extracts were obtained. Thus, the protein content varied within 45.0-67.5% dry weight, carbohydrates 4.3-8.0% dry weight, catalase activity from 709.3 to 1436.9 mmol/min/mg protein, SOD activity – from 6.2 to 44.5 U/mg protein.

The development of technologies for the production of feed protein and other biologically active substances, based on waste from the wine industry, is relevant, both in terms of the safe use of this raw material and the elimination of environmental risks. Disposal of production waste that pollutes the human environment is one of the most important environmental and economic problems of society. A lot of waste is generated during the production of wine. Complex processing of secondary raw materials of winemaking is recognized not only as necessary and useful from the point of view of environmental protection and recreational activities, as it helps to reduce environmental pollution, but also as a highly efficient type of commercial activity. The use of yeast as a source of bioactive substances and complexes is one of the important areas of modern biotechnology.

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