

Process for extracting mannoproteins from brewer's yeast sediments

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Aim: The invention relates to microbial biotechnologies, in particular to the process of extracting mannoproteins from yeast sediments from waste from the beer industry.



Essence: The process according to the invention includes the use of brewer's yeast biomass (30 g) which is mixed with 30 ml of sodium phosphate buffer (1:1 ratio) then subjected to autolysis at +37°C or +45°C for 8 hours, with periodic stirring, then centrifuged and the process of remaining the sediments with 1N NaOH solution (1: 5 ratio) at +80±5° C for 2 hours, centrifugation at 3500 rpm. For 15 minutes, the alkaline supernatants obtained were sedimented with 96% ethyl alcohol in a volume of 1: 2.



Advantage: Elaboration of a process for extraction of mannoproteins from yeast sediments from beer production, which allows obtaining 7-16% more mannoproteins than the nearest solution, use of waste that pollutes the environment, reduction of autolysis time, temperature and amount of ethyl alcohol used.

Field of application: Environment-Pollution Control, Agriculture, Zootechnics, Medicine - Health Care-Cosmetics, Food and Pharmaceutical Industry

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