

Institute of Microbiology and Biotechnology

282.

Organization	Institute of Microbiology and Biotechnology, Chisinau, Republic of Moldova
Patent / patent application title	PROCESS FOR EXTRACTING MANNOPROTEINS FROM BREWER'S YEAST SEDIMENTS
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Patent / patent application N°	Patent application No. A 20210004, 2021.01.29.
Description	<p>Procedeul, conform invenției, prevede utilizarea biomasei de levuri din deșeurile industriei de bere (30 g) care se amestecă cu 30 ml soluție tampon fosfat de sodiu (raport 1:1), apoi se supune autolizei la +37°C sau +45°C timp de 8 ore, cu agitare periodică, centrifugarea, prelucrarea sedimentelor cu soluție 1N NaOH (raport 1:5) la temperatura de +80±5°C timp de 2 ore, apoi se efectuează centrifugarea la 3500 rot./min timp de 15 min și supernatantele alcaline obținute se sedimentează cu alcool etilic 96% în volum 1:2. Procedeul permite obținerea cu 7-16% mai multe manoproteine comparativ cu varianta martor.</p> <p>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 hours, with periodic stirring, then centrifugation and the process of remaining the sediments with 1N NaOH (1:5) ratio solution 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. The process allows obtaining 7-16% more mannoproteins compared to the control variant.</p>
Domain	Environment protection; Zootechnics; Food products; Pharmaceuticals; Medicine and Agriculture