

a 2007 0130

The invention refers to biotechnology, in particular to a process for deep cultivation of *Rhodotorula gracilis* CNMN-Y-03 yeast strain and may be used in the microbiological industry for obtaining carotinoid pigments.

The process, according to the invention, includes the yeast culture growing on malt agar beer wort, treatment of the yeast culture with millimetric waves of low intensity with $\lambda=5,6$ mm emitted in periodic regime of 15...20 min, preparation of the spore suspension by washing the yeast culture with distilled water, preparation of inoculum by cultivation of the spore suspension on beer wort during 72 hours, introduction of inoculum in the quantity of 5 vol.% in the nutrient medium, containing, g/L: KH_2PO_4 – 1,0; NaCl – 0,5; $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ – 0,5; CaCl_2 – 1,0; $\text{Fe}_2\text{SO}_4 \cdot 7\text{H}_2\text{O}$ – 0,00003; glycerine – 40,0; molasses – 20,0; corn oil – 1,0; drinking water up to 1 L and deep cultivation in conditions of continuous agitation, lighting of 12...15 thousand erg/cm^2 , temperature of 25...27°C, during 96 hours.

The result consists in increasing the content of carotinoid pigments and in reducing the cultivation time.

Claims: 1