

Abstracts



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Effect of the Temperature in the Flocculation of *Saccharomyces cerevisiae*

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The property, designated flocculation, whereby yeast cells aggregate in clumps which rapidly sediment in the medium (Stewart 1975) has received considerable attention due to its industrial application, mainly in brewing industry (Stewart and Russell 1981). This phenomenon is also of interest as a model of eucaryotic cell-cell interactions which is subject of a control by a complex variety of factors: genetic, environmental and metabolic.

In this research, three flocculent strains of *Saccharomyces cerevisiae* were used: NRRL Y265, NCYC 869 (*FLO1*) and NCYC 1195 (New Flo). Yeasts were grown in YEPD or in YM broth at different temperatures. When the cultures reached the stationary phase, cells were collected, rinsed and placed in standard flocculation conditions.

The effect of temperature upon flocculation capacity of each strain for the different culture conditions, was studied.

Temperatures higher or lower than 30°C gave rise, in general, to a lower flocculation ability of the strains. However, this change is strain-dependent. Furthermore, the temperature effect is more pronounced with poor culture medium (YM).

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