

عنوان مقاله:

Evaluation of Heat Stress on Ethanol yield Produced from *Kluyveromyces marxianus* Immobilized by Silica gel from Whey

محل انتشار:

چهارمین کنفرانس بین المللی علوم و مهندسی (سال: 1395)

تعداد صفحات اصل مقاله: 7

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خلاصه مقاله:

This study aimed to evaluate heat shock the efficiency of ethanol production by yeast *Kluyveromyces marxianus* var *fragilis* (PTCCno: 9159) established in Silica gel carrying the whey. This Purpose the first was sampled daily dairy company. Sterilized Samples for further assessment were used. Yeast of established *Kluyveromyces fragilis* carrier Silica gel compared to the free mode of ethanol production and consumption lactose under the pre-shock temperature of 50°C (within 15 and 30 minutes) were evaluated. Incubation temperatures of 30, 35, 40 and 45°C were used separately and in triplicate. Results showed that the maximum amount of ethanol in the incubation temperature of 35°C under the pre-shock heat for 15 minutes. Highest stabilized efficiency of ethanol production by yeast in whey substrate containing Silica gel and free in the incubation temperature was 4, and was selected by the heat pre-shock. And to investigate the stability of condition within 15 Run batch and continuous evaluation continued. Also results showed that the largest amount of ethanol in yeast stabilized silica carrier in batches of 11, incubation at 35 ° C, under pre-shock 15 min and the batch of the heat shock 11 to 15, the rate of production ethanol and use of lactose remained constant

کلمات کلیدی:

whey, Silica gel, *Kluyveromyces marxianus* var *fragilis* 9159

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/539182>

