

EVALUATION OF INVERTASE PRODUCTION BY SACCHAROMYCES CEREVISIAE FROM DISTILLERY USING MOLASSE MEDIUM.

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Invertase is one of the most widely used industrial enzymes. *Saccharomyces cerevisiae* show greatest ability to secrete invertase because of its characteristic high sucrose fermentability. Sucrose is designated as the best carbon source in medium because availability of glucose for yeast was dependent on sucrose hydrolysis by invertase. The aim of this work was to describe the biomass production and invertase activity by *Saccharomyces cerevisiae* (from distillery industry), growth in batch cultures using sugar cane molasse as carbon source. The microorganism was inoculated in media containing sugar cane molasse (autoclavated for 20 min at 121°C), (NH₄)₂SO₄ 0.5g/L and KH₂PO₄ 0.25g/L with grade Brix 14 pH 6.5 on submerged anaerobic conditions. The growth of the strain *Saccharomyces cerevisiae* was performed at 30°C, for 40hours and the samples harvested were analysed for sugar consumption by DNSA method. *Saccharomyces cerevisiae* produced 7.566 g of biomassL⁻¹ while its *invertase activity* was 11.43 U/g after 4h and 9.23 U/g after 40h incubation in these conditions. These results show that good invertase production could be obtained by yeast from distillery industry using molasses as growth medium.

Key words: *Saccharomyces cerevisiae*, sugar cane molasse, invertase.

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