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**Production of levan by *Bacillus licheniformis* NS032  
in sugar beet molasses-based medium**

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**KEYWORDS:** levan; molasses; molecular weight

**ABSTRACT**

The production of levan by *Bacillus licheniformis* NS032 in a medium based on sugar beet molasses was studied. High polysaccharide yields were produced by using diluted molasses (100-140 g/L of total sugars) with the addition of commercial sucrose up to 200 g/L of total sugars, as well as K<sub>2</sub>HPO<sub>4</sub>. A levan yield of 53.2 g/L was obtained on a medium optimized by response surface methodology, containing 62.6% of sugar originating from molasses, and 4.66 g/L of phosphate, with initial pH value of 7.2. In comparison to the media with 200 and 400 g/L sucrose, in the molasses optimized medium, the observed bacterial growth was faster, while the maximum

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