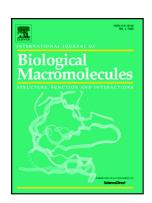
## Accepted Manuscript

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## CCEPTED MANUSCRIPT

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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