Extracellular Xylanase Production by Two Thermophilic Alkali-Tolerant *Bacillus*Strains in Batch and Continuous Cultures

Elka I. Emanuilova*, Plamen L. Dimitrov, Rossica D. Mandeva, Margarita S. Kambourova and Stefan A. Engibarov

Department of Extremophilic Bacteria, Institute of Microbiology, Sofia 1113, Bulgaria. Fax: +359-2-700109. E-mail: eemanuil@microbio.bas.bg

* Author for correspondence and reprint requests

Z. Naturforsch. **55c**, 66–69 (2000); received July 14/September 21, 1999

Thermostable Xylanases, Batch Culture, Continuous Culture, *Bacillus*Xylanase production of newly isolated thermophilic alkali-tolerant *Bacillus sp.* strain SP and strain BC was investigated in batch and continuous cultures. Enzyme synthesis was inducible with both strains and was observed only in xylan-containing media. Xylan from oat spelt is a better inducer than xylan from birch for strain *Bacillus sp.* BC while such difference was not observed for strain SP. Compared with batch cultures xylanase production of both strains increased about two times and its rate became more than four times faster in continuous cultures at a dilution rate of 0.2 h⁻¹.