

Production and Properties of a Bacterial Thermostable Exo-Inulinase

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Enzyme production of newly isolated thermophilic inulin-degrading *Bacillus sp.* 11 strain was studied by batch cultivation in a fermentor. The achieved inulinase and invertase activities after a short growth time (4.25 h) were similar or higher compared to those reported for other mesophilic aerobic or anaerobic thermophilic bacterial producers and yeasts. The investigated enzyme belonged to the exo-type inulinases and splitted-off inulin, sucrose and raffinose. It could be used at temperatures above 65 °C and pH range 5.5–7.5. The obtained crude enzyme preparation possessed high thermostability. The residual inulinase and invertase activities were 92–98% after pretreatment at 65 °C for 60 min in the presence of substrate inulin.