

P24

**Optimal culture conditions for the production of pullulan by
Aureobasidium pullulans HP-2001**

Hyung-Pil Seo, Chang-Woo Son, Hyun-Sook Kim,
Sung-Koo Kim¹ and Jin-Woo Lee*

Division of Biotechnology, Faculty of Natural Resources and Life Science, Dong-A University, Pusan 604-714, Korea and 1Division of Food & Biotechnology, Pukyong National University, Pusan 608-737, Korea

*Corresponding author (Fax : 82-51-200-7593, E-mail : jwlee@mail.donga.ac.kr)

The production of pullulan by *Aureobasidium pullulans* HP-2001 was investigated under various ratios of glucose as the carbon source to yeast extract as the nitrogen source. *A. pullulans* HP-2001 was the UV-induced mutant of *A. pullulans* ATCC 42023 and showed to overcome catabolite repression against glucose up to 20%(w/v). The highest conversion rate of pullulan from glucose was 36.7% when concentrations of glucose and yeast extract were 5% (w/v) and 0.15% (w/v), respectively. Maximal production of pullulan was 26.6 g/l when concentrations of glucose and yeast extract were 8% (w/v) and 0.25% (w/v), respectively. Optimal pH of medium and concentration of K₂HPO₄ for the production of pullulan were 6.0 and 0.2% (w/v), respectively.