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Production of β -glucan by *Aureobasidium pullulans* SM2001

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Production of β -glucan by *Aureobasidium pullulans* SM2001, UV induced mutant of *A. pullulans* ATCC 42023, was investigated. Among carbon sources tested in this study, mannose and sucrose were found to be suitable carbon source for the production of β -glucan. Production of β -glucan increased as concentration of sucrose as the carbon source increased up to 10% (w/v). The highest conversion rate was 49% when concentration of sucrose in the medium was 0.5% (w/v). The β -glucan purified from the culture broth of *A. pullulans* SM2001 was confirmed to be β -1,3-linked homoglucons containing a few β -1,6-linked single glucosyl branches by NMR spectroscopy. The monomeric composition of the β -glucan was found to be glucose by GC analysis. The molecular weight of the β -glucan ranged from 1.89×10^7 to 2.67×10^5 .