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Effect of temperature on cell growth and production of cellulse by *Bacillus amyloliquefaciens*DL-3 in a 7L jar fermenter

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Effect of temperature on cell growth and production of cellulase by *Bacillus amyloliquefaciens* DL-3 was investigated. Temperatures for batch cultures were 25, 30, 32, 35, 37 and 42°C. Working volume of 4L in a 7L jar fermenter (KoBioTech, Korea) and the composition of medium was 2.0% (w/v) glucose, 0.25% yeast extract, 0.5% K₂HPO₄, 0.1% NaCl, 0.02% MgSO₄·7H₂O and 0.06% (NH₄)₂SO₄, Aeration rate and agitation speed were 1.0 vvm and 400 rpm. PH of culture media except for the culture incubated at 25°C rapidly decreased until 10 hr and slight increased. Cell growth (DCW) and concentration of total protein in the culture increased with culture temperature but the maximal production of cellulase obtained when the culture temperature was 35°C.