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Influence of inoculum size and initial pH on production of curdlan by *Agrobacterium* sp. ATCC 31749

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Production of curdlan by *Agrobacterium* sp. was investigated with various amount of inoculum and initial pH of medium. Increased inoculum size resulted in improvement of production of curdlan. Nitrogen limitation was essential to produce curdlan. Initial pH of medium also affected the production of curdlan. Process with two stage culture was developed to improve production of curdlan. The first stage was to increase the cell growth by the addition of 0.5% yeast extract into the MSM and the second stage was to enhance production of curdlan without nitrogen source. The maximal conversion rate of glucose to curdlan with concentrated cell was 67% when the initial pH of second stage was adjusted to 5.0.