

Production of Citric Acid from Apple Pomace Enzymolyzed by Cellulase

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摘要 Cellulase can evidently increase the content of glucose and has a significant effect on the production of citric acid from apple pomace by *Aspergillus niger*. Based on experiments, a cellulolytic enzyme named cellulase A6 was found able to produce about 170 g glucose from 1 kg dried apple pomace after 12 h reaction, with cellulase concentration of 20 U/g in the medium at 50°C, natural pH without pretreatment of alkali. Using the treated apple pomace as a liquid state substrate, *Aspergillus niger*-C selected out was able to produce about 256 g citric acid from 1 kg dried apple pomace at 35°C in 3 d or 30°C in 5 d with flask rotation speed of 210 r/min, and the conversion of citric acid could reach 80% based on the amount of sugar consumed.

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