Effect of agricultural byproducts on production of cellulase by *Bacillus amyloliquefaciens* DL-3

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Effect of carbon sources including agricultural byproducts on cell growth and production of cellulase by *Bacillus amyloliquefaciens* DL-3 was investigated. The carbon sources used in this study were rice hull, rice bran, carboxymethyl cellulose (CMC), cellulose, avicell, expanded rice hull, apple pomace and glucose. Rice hull and rice bran were found to be the best substrates for cell growth of *B. amyloliquefaciens* DL-3. More investigation with rice hull and rice bran were conducted. The concentration of two substrates as a carbon source ranged from 0.0% to 5.0%. The optimal concentrations of rice hull and rice bran were found to be 2.0% for cell growth and production of cellulase by *B. amyloliquefaciens* DL-3. Maximal cell growth and production of cellulase with rice hull occurred at 24 hr whereas those with rice bran were observed at 48 hr.

References

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