

Effect of reactor surface on BC production by *Gluconacetobacter hansenii* PJK

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The addition of agar in the medium resulted in the increase in the production of bacterial cellulose (BC) in previous research articles. The agar was known to increase the viscosity of the medium and thus, this resulted in increase in BC production in shaking and agitation culture. In this study, the effect of agar plate on the BC production was investigated in order to find out another role of agar component in the BC production. Agar plates were prepared and placed on the bottom of the culture reactor and BC production was done. A control was done by the same procedure without agar plate. The dry weight of BC with cells and water holding capacity of BC sheets cultured with agar plates were compared with those of control. It was found that the yield and productivity of the BC on the agar plates was enhanced compared to the control. The water holding capacities were same.

References:

1. J.K. Park et. al., Biotechnology Letter, 25 (2003) 2055-2059.
2. S. Bae et. al., Journal of Bioscience and Bioengineering, 7 (2004) 33-38