

A Study of the Submerged Fermentation of the Mycelium of the Medicinal Mushroom *Grifola frondosa* (Dicks.: Fr.) S. F. Gray

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On the basis of the single factor test of nitrogen and carbon source followed by the orthorhombic experiment, the proper fermentative medium selected for mycelium production of *Grifola frondosa* (Dicks.: Fr.) S. F. Gray is composed of 3% sucrose, 3% bran, 0.2% KH_2PO_4 , 0.05% MgSO_4 , and 5ppm VB_1 . The proper cultivating conditions are as follows: natural ini-

tial pH, 25–26, 10% inoculums and 110 rpm rotating speed, during 6 cultivation days. Quantities of 2.761 g/100 ml of biomass, 381 mg/100 ml of intracellular polysaccharides, 317 mg/100 ml of intercellular polysaccharides, and as much as 530 mg/100 ml of the total amount of polysaccharides can be obtained.