

PREPARATION OF AN ACTIVATION MEDIUM FOR *Bacillus Licheniformis* 6346

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Different imported media are used for the activation of bacteria from stock cultures. Due to the present crisis availability of these media is limited. Thus alternatives for nutrient broth were studied. The activation media for *Bacillus licheniformis* 6346 were prepared by taking either beef extract (20 ml) or nutrient broth (20ml, 25 g l⁻¹) and soluble starch (3.0 g l⁻¹). The activation media (20ml) were inoculated with two loopsful of *B.licheniformis* from stock culture and incubated at 42°C for 19 h. These were (5 ml) again mixed to 20 ml of the respective activation media and incubated at 42°C for 5 h to prepare the inoculum. Different inocula (20 ml) were added to solid medium (80 g) and incubated at 42°C. Solid medium contained (g Kg⁻¹ paddy husk, 300; rice flour, 10; soya, 32 and (NH₄)₂ HPO₄, 6.4 and (ml kg⁻¹) gingili oil, 9.0; coconut oil, 3.0 and tap water, 440. At 4th day the α -amylase activity obtained in solid medium inoculated with *B. licheniformis* in different activation media prepared from beef extract, soya bean powder extract, fish extract and nutrient broth were 430, 779, 1180 and 1221 μ mole g DBM⁻¹ min⁻¹ respectively. Then fish extract activation medium was supplemented with 0.0, 1.0 and 3.0 g l⁻¹ (NH)₂ HPO₄, maximum α - amylase produced at 4th day were 1180, 1312 and 1426 μ mole g DBM⁻¹ min⁻¹ respectively. When fish extract activation medium was supplemented with 3.0 g l⁻¹ (NH₄)₂ HPO₄ and 1.0 g l⁻¹ yeast extract, maximum α-amylase activity obtained in the solid medium was 887 μ mole g DBM⁻¹ min⁻¹, while when the control activation medium, which does not contain yeast extract, was inoculated to solid medium, maximum α -amylase activity (1246 μ mole g DBM⁻¹ min⁻¹) was obtained at 4th day. Hence fish extract supplemented with 3.0 g l⁻¹ (NH₄)₂ HPO₄ and 3.0 g l⁻¹ soluble starch can be used to activate *B.licheniformis*.

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