

Impacts of Cultural Conditions on the Production of Extracellular Protease by *Streptomyces albolongus* and *Streptomyces aburaviensis*

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Abstract:

Proteolytic action of two segregates of actinomycetes, *Streptomyces albolongus* and *Streptomyces aburaviensis* was examined based on their capacity to hydrolyze skimmed milk casein, egg whites and gelatin. Both segregates were found to have potential for extracellular proteases creation. Impacts of culture conditions for the creation of extracellular protease from *S. albolongus* and *S. aburaviensis* were resolved. Most elevated protease yield from *S. albolongus* was acquired following 5 days of brooding with an underlying pH 7, at static state when vaccinated in medium made out of 1% glucose, 2% meat separate, 0.2% yeast remove, 0.1% KH₂PO₄, 0.3% K₂HPO₄, and follow MgSO₄·7H₂O. Ideal brooding conditions for *S. aburaviensis* were 4 days, with an underlying medium pH 8 at shaking condition (100 rpm). *S. aburaviensis* favored 1.5% lactose and 1.5% tryptone as a carbon and nitrogen source. Both the disengages demonstrated greatest protease yield at 37° C. The aftereffect of the current examination may be useful for largescale creation of extracellular protease from these *Streptomyces spp.*