

Production of Biosurfactant by *Pseudomonas luteola* on a Reject from the Production of Anti-scorpion Serum

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Abstract : This study deals with the production of biosurfactant by the *Pseudomonas luteola* strain on three different culture media (semi-synthetic medium M1, whey, and pharmaceutical reject) in the presence of gasoil. The monitoring of bacterial growth by measuring the optical density at 600 nm by spectrophotometer and the surface tension clearly showed the ability of *Pseudomonas luteola* to produce biosurfactants at various conditions of the culture medium. The biosurfactant produced in the pharmaceutical reject medium generated a decrease in the surface tension with a percentage of 19.4% greater than the percentage obtained when using whey which is 7.0%. The pharmaceutical rejection is diluted at various percentages ranging from 5% to 100% in order to study the effect of the concentration on the biosurfactant production. The best result inducing the great reduction of the surface tension value is obtained at the dilution of 30% with the pharmaceutical reject.

Keywords : biosurfactant, *pseudomonas luteola*, whey, antiscorpionic serum, gas oil

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