

## BIOCHEMICAL CHANGES IN THE FERMENTATION MEDIUM DURING L-METHIONINE PRODUCTION BY *BREVIBACTERIUM ROSEUM* SXS2470

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*The present investigation was carried out to investigate the biochemical changes in the fermentation broth during submerged L-methionine fermentation using a mutant Brevibacteriumroseum SXS2470. Dry cell weight rosewith the concomitant increase in of L-methionine production along with the accumulation of  $\alpha$ -ketoglutarate, pyruvate and succinate in the fermentation broth with sharp decrease in residual sugar content. The pH of the medium decreased graduallyafter 72h. The amino nitrogen increased up to 72h of incubation as an indication of the product formation. Cell nitrogen and ammonical nitrogen also increased gradually throughout the fermentation period.This study was selected to get an idea about the metabolic diversity exhibited during the course of L-methionine production by this mutant.*

**Key words:** Brevibacterium roseum SXS2470, Dry cell, L-methionine,  $\alpha$ -ketoglutarate, succinate, ammonical

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