

## ABSTRACT

The Present study describes the fermentative production of L-lysine by submerged fermentation process using *Corynebacterium glutamicum* NRRL-B2784. Out of ten different fermentation media, the maximum production of 5.8g/L L-lysine was detected in Medium No. 10 in Erlenmeyer Shake Flask. This medium was further used, as basal medium, for the optimization of various physical and chemical parameters for the production of L-lysine. The optimization studies revealed that glucose and  $(\text{NH}_4)_2\text{SO}_4$  were best carbon and nitrogen sources, respectively, for L-lysine production. Maximum production of 13.5g/L L-lysine was achieved at 34°C, pH 7.5, 200rpm agitation rate after 72hrs of incubation.