

SUMMARY AND CONCLUSION:

The Aim of the experiments is to optimize the content of Yeast Extract in the Super Broth used as part of the media for the large scale production of a particular protein. For this purpose the cell growth as well as the protein production after induction is checked to see the effect of varying Yeast Extract concentrations on the production of the protein as well as the growth of *E.coli*.

The concentrations of Yeast Extract used were 1.2 %, 2.4 % and 4.8 %. Each experiment was repeated about five times for nullifying the possible handling errors as well as to obtain a statistical result.

Also protein expression was checked using SDS-PAGE and both the results were used to draw conclusions.

From the results (calculations of growth rates as well as the results of protein expression) it was concluded that the optimum and economically acceptable Yeast Extract concentrations for upscaling was *1.2 % Yeast Extract*.