

Design of experiment for production of citric acid using 2-level factorial method

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Statistical Experimental Design was employed for the improvement of citric Acid production from *Madhuca indica* through submerged fermentation process using *Aspergillus niger* MTCC 282. The results obtained from the two-level full factorial design with six factor combinations show effects free from confounding, that is, all effects are distinguishable from other effects by doing fewer runs with all possible combinations. The results obtained from two level full factorial design showed that Mg 0.05mg/ml, (NH₄)₂ SO₄ 0.2 g/l, EDTA 0.2g/l, KH₂PO₄ 2 g/l were found to be major factors for the production of citric acid. The Statistical analysis showed that maximum production of citric acid was obtained at pH 4.

Biography

R. Gopinadh has completed his under graduation in Chemical Engineering and Masters in Biotechnology from Andhra University. He is Pursuing his Ph.D in Biotechnology. He is working in GITAM University as Assistant Professor in Department of Biotechnology. He has published more than 10 papers in reputed journals and serving as a member for Various Technical Committees. His area of interest is in Bioprocess Engineering and Down Stream Processing.

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