

ABSTRACT

Extra cellular lipase is a lipolytic enzyme which belongs to the class hydrolases and it catalyses the breakage of ester bonds in triglycerides and results in the formation of glycerol and free fatty acids. Hence, lipase is very important enzyme as well as the leather industries, paper and pulp industries, and pharmaceutical industries are concerned. Lipase was extracted and purified from germinating flaxseeds by (NH₄)₂SO₄ precipitation, dialysis and column chromatography. Flax seeds are common linseeds, belong to family Linaceae, having nutritional, medicinal and health applications. Acidbase titration method and spectrophotometer was used for lipase assay in this particular research project. Lipase activity increased from 6.75 U/ml to 16.87 U/ml by (NH₄)₂SO₄ precipitation with specific activity increased from 1.391 U/mg to 15.34 U/mg. Furthermore, the activity increased from 6.75 U/ml to 26.82 U/ml with specific activity increased from 1.391 U/mg to 45.075 U/mg by column chromatography which was the final step.