

# Selection of Lipase-Producing Microorganisms through Submerged Fermentation

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Lipases are enzymes used in various industrial sectors such as food, pharmaceutical and chemical synthesis industries. The selection of microorganisms isolated from soil or wastewater is an alternative to the discovery of new species with high enzymes productivity and with different catalytic activities. In this study, the selection of lipolytic fungi was carried out by submerged fermentation. A total of 27 fungi were used, of which 20 were isolated from dairy effluent and 7 from soil contaminated with diesel oil. The largest producers were the fungi *Penicillium* E-3 with maximum lipolytic activity of 2.81 U, *Trichoderma* E-19 and *Aspergillus* O-8 with maximum activities of 2.34 and 2.03 U where U is the amount of enzyme that releases 1  $\mu$ mol of fatty acid per min per mL of enzyme extract. The fungi had maximum lipolytic activities on the 4th day of fermentation.

**Key words:** Filamentous Fungi, Lipase, Screening, Submerged Fermentation