

Optimization of tannase production by *Lactobacillus plantarum*

Authors:

Noor M and
Aswan H. Al-Bayyar

Institution:

Department of Food Science,
College of Agriculture,
Baghdad University, Iraq.

Corresponding author:

Noor M.

ABSTRACT:

Three bacterial isolates were tested for tannase production; *Lactobacillus plantarum* was the best in enzyme production which was 6.842 U/mL. To stand on the best conditions for enzyme production, some conditions were studied such as inoculum size, incubation time, carbon source and its concentration, nitrogen source and its concentration beside the concentration of casamino acid, incubation temperature and pH. Results showed that the best production of tannase was by using: 1×10^7 spore/ml, 48 h, pomegranate peels 0.2%, sodium nitrate 0.3%, casamino acid 0.3% , at 35°C, pH 7 with using FeSO₄ 0.002% and MgSO₄ 0.2%.

Keywords:

Lactobacillus plantarum, casamino acid, Tannase, Enzyme production.