

Enzymatic properties of microbial solid starters on coconut oil recovery

Abstract

To understand the enzymatic capacities for coconut oil extraction, three microbial isolates representing *Aspergillus oryzae* K1A (mold), *Candida rugosa* K2A (yeast), and *Lactobacillus plantarum* K3A (bacteria) were compared. We confirmed that all tested strains produced amylase, protease, and lipase. However, among the tested strains, K3A shows the highest activities of amylase, protease and lipase reaching 1.48 IU/ mL, 2.24 IU/mL and 2.01 Iu/ml, respectively, under the laboratorial condition. As predicted, those enzymes are related to oil extraction yielding the highest oil recovery from coconut milk as much as 23.5% (v/v).