EXTRACTION AND CHARACTERIZATION OF LIPASE FROM SEED OF *Hevea brasiliensis*

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ABSTRACT

EXTRACTION AND CHARACTERIZATION OF LIPASE FROM SEED OF *Hevea brasiliensis*

Acetone powder was obtained from seed of *Hevea brasiliensis* as the source crude lipase. Activity of Lipase from ungerminated seed and germinated seed was examined by their ability on hydrolysis of FFA and also selectivity on FFA. Lipase from germinated seed show highest activity on hydrolysis of long chain fatty acid (palm oil) and short chain fatty acid (coconut oil) compared to the ungerminated seed. Lipase activity was more pronounce in coconut oil with short chain fatty acid rather than palm oil with long chain fatty acid. The amount of enzyme activity for germinated seed lipase in hydrolysis of coconut oil is 115 x 10^{-5} mol.g/h, while for palm oil is $8.17x10^{-5}$ mol.g/h. Lipase from ungerminated seed have low activity on hydrolysis of oil, for coconut oil enzyme activity is $9.96x10^{-5}$mol.g/h and for palm oil is 92.3 $x10^{-5}$ mol.g/h. Lipase from seed of *Hevea brasiliensis* is non-selective toward fatty acid caprylic acid (C:8), capric acid (C:10), lauric acid (C:12), myristic acid (C:14), palmitic acid (C:16),stearic acid (C:18).