Abstract

The kinetics of cellulase from palm weevil larva (Rhynchochophorus palmarum) was studied. The enzyme was assayed using carboxymethyl cellulose (CMC) as a substrate. The result showed that the optimum temperature was 20°c and its optimum pH was 6.0. The substrate effect followed the Michealis Menten pattern and it had V_{max} and K_m of 0.167mmol/s and 0.079mmol, respectively. The effect of heavy metals on the enzyme activity also showed

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that Al and Pb enhanced activity of the cellulase, while NH₄, Hg, Stanium, Ba, Ca and Cu inhibited the activity of the enzyme. This work therefore concluded that palm weevil larva is good source of cellulase enzyme.