

# Production and characterization of the protease from *Bacillus amyloliquefaciens* V656

吳文傑、王三郎

E-mail: 9318501@mail.dyu.edu.tw

## ABSTRACT

There was a protease producing microbe isolated from soil at TAIWAN named *Bacillus amyloliquefaciens* V656. Purification and characterization of protease from *B. amyloliquefaciens* V656 are targets of the study. The optimized conditions for protease production was found when the culture shaken at 30 ° C for 2 days in 100 ml of medium (pH value adjusted to 7.0) containing 2% shrimp and crab shell powder (SCSP), 0.1% K<sub>2</sub>HPO<sub>4</sub>, 0.05% MgSO<sub>4</sub> · 7H<sub>2</sub>O. Under the conditions, the protease of *B. amyloliquefaciens* V656 attained the activity was 0.15 U/mg. After purification procedure, the protease from *B. amyloliquefaciens* V656 shows heat stability and has a molecular weight is 28kDa. The optimum pH value and temperature are pH8 and 37 .

Keywords : protease ; enzyme purification ; SCSP ; *Bacillus amyloliquefaciens* V656

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