

# **RESEARCH ON THE HYDROLYSIS OF BY PRODUCT OF FISH PROCESSING (BLOOD AND MUCILAGE) TO PRODUCE FOLIAGE FERTILIZER FOR AGRICULTURE**

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## **Summary**

The by product of basa fish processing (blood and mucilage) in Cuu Long Delta, is the pollution to environment, which is hydrolyzed to make bio-fertilizer for vegetables. The result shows that the enzyme protease of *Alcalase* after 12 hrs give the best effect of hydrolysis, with the ratio of N formol/N total up to 90.2%. The suitable dose of enzyme *Alcalase* is 0.1% (w/w), the optimum temperature for hydrolysis with the enzyme *Alcalase* is 60<sup>0</sup>C and the optimum pH is 8. After testing the foliage fertilizer making from blood and mucilage of basa fish on Chines brasicca, the result show that the yield of the vegetable increases 20%-30% when spray the hydrolysed blood and mucilage of basa fish only, and increases 49.5% - 58.4%, when spray the hydrolysed blood and mucilage of basa fish adding NPK (3:1:2) and humus acids (4% fulvic and humic).

Keywords: *Side products, hydrolysis, enzyme protease.*