

IDENTIFICATION OF FACTORS AFFECTING THE BIOLOGICAL MATURATION OF CATFISH FILLETS

Pham Thi Diem, Bui Thi Thu Hien, Pham Thi Mat

Summary

The aim of this study is to develop one of new products from *pangasius* fish towards the conservation and improvement of the product nutritional value and biological value. This article reported the technique of maturing fish fillets in saline solution using of enzyme catalyst, acid pH and cold cooling. At the same time, the effectiveness of factors such as salt concentration, enzyme activity on the quality parameters included nitrogen content, amino acids, buffering capacity and total nitrogen content were studied during biological maturation of *pangasius* fillets for 72 to 240 hours at 5-7⁰C. The results showed the value ranges of each factor has a strong influence on the quality of fish meat in the maturation process. The followings were optimal parameters indentified: 15-20% salt concentration in immersion solution, pH 3.5 - 4.0, enzyme concentration 0.07 – 0.09%. In addition, skin-free and deodorised fillets were good suitable material selected for processing of biologically matured catfish fillets product.

Keywords: *Pangasius*, biological naturation, buffering capacity, N- amino acid, total nitrogen content.