

**PENGARUH KONSENTRASI ENZIM BROMELIN  
KASAR TERHADAP KARAKTERISTIK  
HIDROLISAT PROTEIN DARI LIMBAH AMPAS  
TAHU**



**Musfida Anggun Putri M  
1511122033**

**Pembimbing**

- 1. Deivy Andhika Permata, S.Si. M,Si**
- 2. Wenny Surya Murtius, S.Pt, MP**

**FAKULTAS TEKNOLOGI PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2020**

## **Pengaruh Konsentrasi Enzim Bromelin Kasar Terhadap Karakteristik Hidrolisat Protein dari Limbah Ampas Tahu**

Musfida Anggun Putri M<sup>1</sup>, Deivy Andhika Permata<sup>2</sup>, Wenny Surya Murtius<sup>2</sup>

### **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan konsentrasi enzim bromelin kasar dan karakteristik hidrolisat protein serta mengetahui konsentrasi enzim kasar terbaik dalam pembuatan hidrolisat protein ampas tahu. Enzim yang digunakan dalam penelitian ini adalah enzim kasar yang berasal dari buah nanas dengan aktivitas enzim 0,93 U/ml. Metode yang digunakan dalam penelitian ini adalah Rancangan Acak Lengkap dengan 5 perlakuan dan 3 ulangan yaitu penggunaan enzim kasar 4%, 5%, 6%, 7%, dan 8%. Data dianalisis secara statistik dengan uji F, jika berbeda nyata, dilanjutkan dengan *Uji Duncan's New Multiple Range Test* (DNMRT) pada taraf signifikansi 5%. Parameter yang diamati adalah rendemen, total padatan, kadar abu, kadar protein, kadar lemak, dan derajat hidrolisis. Konsentrasi kasar enzim bromelin berpengaruh nyata terhadap rendemen, total padatan, kadar protein, dan derajat hidrolisis, tetapi tidak berpengaruh nyata terhadap kadar abu dan kadar lemak. Konsentrasi enzim bromelin kasar yang tepat dalam menghidrolisis ampas tahu adalah enzim bromelin kasar dengan konsentrasi 6% (b/v).

**Key words** - enzim kasar, hidrolisis, hidrolisat, ampas tahu



# **Effect of Concentration of Crude Bromelin Enzyme on the Characteristics of Protein Hydrolisate from Tofu Waste**

Musfida Anggun Putri M<sup>1</sup>, Deivy Andhika Permata<sup>2</sup>, Wenny Surya Murtius<sup>2</sup>

## **ABSTRAK**

**This research aims to study about the effect of differences in concentrations of crude bromelin enzyme an the characteristics of protein hydrolisates and determine the best concentration of crude enzyme in manufacture of protein hydrolisates of tofu waste. The enzyme use in this study was crude enzyme derived from pineapple with enzyme activity of 0,93 U/ml. The method used in this study was a completely randomized design with 5 treatments and 3 replications, namely the use of 4%, 5%, 6%, 7%, an 8% crude enzymes. The data were statically analyzed by the F test, if significantly different, continued with Duncan's New Multiple Range Test (DNMRT) at 5% significance level. The parameter observed were yield, total solids, ash content, protein content, fat content, and degree of hydrolysis. The crude concentration of bromelin enzyme has a significantly effect on yield, total solids, protein content, and degree of hydrolysis, but does not significantly affect the ash content and fat content. The best concentration of crudeenzyme in hydrolyzing tofu wastewas crude bromelin enzyme with concentration of6% (b/v).**

**Keywords- crude enzyme, hydrolysis, hydolysate, tofu waste**

