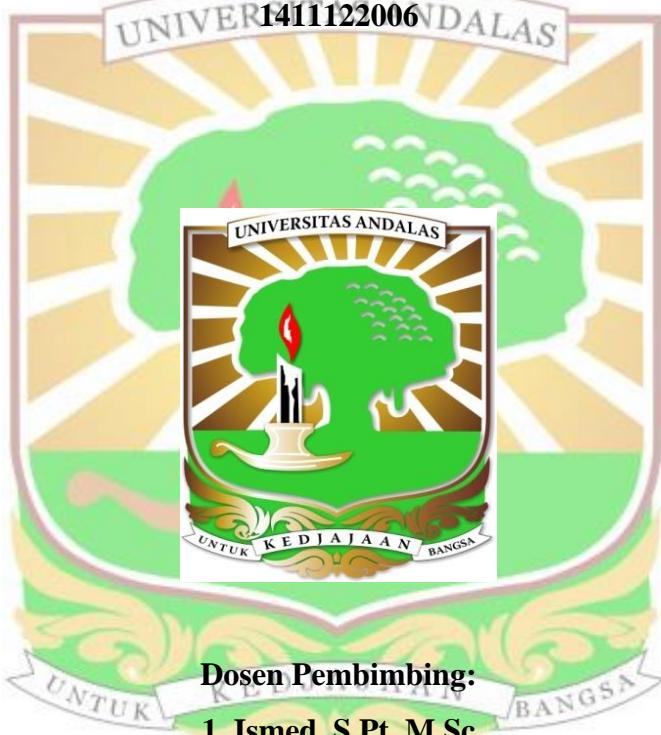


**PENGARUH PENAMBAHAN CRUDE ENZIM BROMELIN  
YANG BERBEDA TERHADAP KARAKTERISTIK KECAP  
IKAN DARI CHUNK MEAT TUNA (*Thunnus sp.*)**

**RIRIN FATMA NANDA**

**1411122006**



**Dosen Pembimbing:**

**1. Ismed, S.Pt, M.Sc**

**2. Deivy Andhika Permata, S.Si, M.Si**

**FAKULTAS TEKNOLOGI PERTANIAN  
UNIVERSITAS ANDALAS  
PADANG  
2018**

# **Pengaruh Penambahan *Crude Enzim Bromelin* yang Berbeda terhadap Karakteristik Kecap Ikan dari *Chunk Meat Tuna (Thunnus sp.)***

Ririn Fatma Nanda, Ismed, Deivy Andhika Permata

## **ABSTRAK**

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan *crude* enzim bromelin terhadap karakteristik fisika, kimia, organoleptik dan mikrobiologi pada kecap ikan dari *chunk meat* ikan tuna. Rancangan yang digunakan pada penelitian ini adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan (perbedaan penambahan larutan *crude* enzim bromelin: 3%; 6%; 9%; 12% dan fermentasi spontan) dengan 3 kali ulangan. Data dianalisis secara statistik dengan menggunakan ANOVA dan dilanjutkan dengan *Duncan's New Multiple Range Test* (DNMRT) pada taraf nyata 5%. Penelitian ini menunjukkan adanya pengaruh penambahan larutan *crude* enzim bromelin terhadap rendemen, warna, kadar abu, kadar protein, kadar nitrogen total, kadar nitrogen amino dan organoleptik (warna, aroma), dan tidak berpengaruh terhadap pH, kadar lemak, natrium klorida (NaCl), organoleptik (rasa) dan Angka Lempeng Total (ALT). Pada hasil uji fisika, kimia, mikrobiologi dan organoleptik, produk terbaik adalah produk kecap ikan tuna dengan penambahan larutan *crude* enzim bromelin 12%, dengan nilai rendemen 83,74%; warna <sup>°</sup>Hue 85,94; derajat keasaman (pH) 5,27; kadar abu 13,53%; kadar lemak 0,40%; kadar protein 15,03%; kadar nitrogen total 2,40%; kadar nitrogen amino 2,15%; natrium klorida (NaCl) 19,25%; organoleptik (warna 3,95; rasa 3,70; aroma 4,20) dan Angka Lempeng Total (ALT)  $3,3 \times 10^3$  koloni/g.

Kata Kunci: *Crude* enzim bromelin, *chunk meat* ikan tuna, kecap ikan

# **The Effect of Adding Different Crude Bromelin Enzyme on Characteristic of Fish Sauce From Chunk Meat of Tuna (*Thunnus sp.*)**

Ririn Fatma Nanda, Ismed, Deivy Andhika Permata

## **ABSTRACT**

This research aims to know the effect of adding crude bromelin enzyme to the physics, chemistry, sensory and microbiology on fish sauce from chunk meat of tuna. This research was designed using Completely Randomized Design (CRD) with 5 treatments (difference of crude bromelin enzyme: 3%; 6%; 9%; 12% and fermentation spontaneously) with 3 replications. The result were analyzed statistically using ANOVA test and Duncan's New Multiple Range Test (DNMRT) at 5% level. This research shows that there is the influence of the addition of crude bromelin enzyme solution against yield, color, ash content, protein content, total nitrogen content, amino nitrogen content and sensory (color, aroma) and doesn't affect on pH, fat content, NaCl content, sensory (taste) and Total Plate Count (TPC). On the results of a test of physics, chemistry, microbiology and organoleptik, the best product is a product with tuna fish sauce on addition of crude enzyme bromelin solution of 12%, with an average value of yield 83.74%; color <sup>°</sup>Hue 85.94; acidity (pH) 5.27; ash content 13,53%; fat content 0,40%; protein content 15,03%; total nitrogen content 2,40%; amino nitrogen content 2,15%; sodium chloride (NaCl) content 19,25%; sensory (color 3.70; taste 3.95; aroma 4.20) and Total Plate Count (TPC)  $3.3 \times 10^3$  colony/g.

Key word: crude bromelin enzyme, chunk meat of tuna, fish sauce

