Intisari

MUTU SURIMI CAKALANG DENGAN PENAMBAHAN KALSIUM KARBONAT (CaCO₃) SEBAGAI AGEN PEMUTIH

Penelitian ini bertujuan untuk mengetahui efek penambahan $CaCO_3$ sebagai agen pemutih terhadap mutu surimi Cakalang yang dihasilkan. Pengukuran kualitas surimi dilakukan dengan melakukan pengujian sifat fungsional surimi baik dengan cara fisik maupun kimia. Dalam penelitian ini dilakukan analisa derajat putih, uji lipat (*folding test*), uji tekstur, *Water Holding Capacity* (WHC) dan analisa kadar lemak. Rancangan percobaan yang digunakan adalah rancangan acak lengkap (RAL), yaitu surimi Cakalang dengan perlakuan penambahan $CaCO_3$ 0%, 0,5%, 1% dan 1,5%. Hasil penelitian menunjukkan bahwa nilai derajat putih terbaik didapatkan pada perlakuan penambahan $CaCO_3$ 1,5% dengan nilai 54,22. Nilai rata-rata uji lipat secara berturut-turut dari perlakuan kontrol sampai perlakuan penambahan $CaCO_3$ 1,5% adalah 1,57, 1,86, 2,14 dan 2,05, dimana semakin banyaknya penambahan kalsium karbonat cenderung meningkatkan nilai uji lipat. Hasil analisa kadar lemak surimi menunjukkan bahwa penambahan konsentrasi kalsium karbonat tidak menunjukkan beda nyata ($P>0.05$) antar perlakuan. Nilainya kadar lemak berkisar antara 1,16% pada perlakuan kontrol (penambahan konsentrasi kalsium karbonat 0%) sampai 1,51% pada perlakuan penambahan kalsium karbonat 1,5%. Nilai WHC surimi Cakalang tidak berbeda nyata antara perlakuan ($P>0.05$) dan semakin banyak penambahan $CaCO_3$ semakin tinggi nilai WHCnya, berturut turut untuk penambahan $CaCO_3$ 0%, 0,5%, 1% dan 1,5% adalah 52,4433%, 66.4200%, 74.57336% dan 79.9567%. Namun uji sensori terhadap warna menunjukkan sangat beda nyata ($P<0.01$) antar perlakuan. Dari hasil penelitian dapat disimpulkan bahwa perlakuan terbaik adalah perlakuan pembahan $CaCO_3$ 1,5% dengan nilai uji lipat 2,05 dan nilai WHC 79,9567.

Kata kunci : Ikan Cakalang, Surimi, Uji Lipat, Uji Tekstur, Analisa Lemak

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Abstract

QUALITY OF SKIPJACK SURIMI WITH ADDITION OF CALCIUM CARBONATE $(CaCO_3)$ AS WHITENING AGENT

This study aims to determine the effect of the addition of $CaCO_3$ as a whitening agent on the quality properties of the Cakalang surimi produced. Measurement of surimi quality is carried out by testing the functional properties of surimi both by physical and chemical means. In this study, white degree analysis, folding test, texture test, Water Holding Capacity (WHC) and fat content analysis were carried out. The experimental design used was a complete randomized design (CRD), namely Cakalang surimi with the treatment of adding $CaCO_3$ 0%, 0.5%, 1% and 1.5%. The results showed that the best white degree value was obtained in the treatment of adding 1.5% $CaCO_3$ with a value of 54.22. The average value of the folding test successively from the control treatment to the treatment of adding $CaCO_3$ 1.5% is 1.57, 1.86, 2.14 and 2.05, where the more calcium carbonate addition tends to increase the folding test value. The results of the analysis of surimi fat content showed that the addition of calcium carbonate concentration did not show significant differences ($P>0.05$) between treatments. The value of fat content ranged from 1.16% in the control treatment (addition of 0% calcium carbonate concentration) to 1.51% in the treatment of adding 1.5% calcium carbonate. The WHC value of Cakalang surimi did not differ significantly between treatments ($P>0.05$) and the more the addition of $CaCO_3$ the higher the WHC value, respectively for the addition of $CaCO_3$ 0%, 0.5%, 1% and 1.5% were 52.4433%, 66.4200%, 74.57336% and 79.9567%. However, the sensory test on color showed a significant difference ($P<0.01$) between treatments. From the results of the study it can be concluded that the best treatment is the treatment of 1.5% $CaCO_3$ with a folding test value of 2.05 and a WHC value of 79.9567.

Keywords : Skipjack Fish, Surimi, Folding Test, Texture Properties, Fat Analysis