



Intisari

PENGARUH KONSENTRASI NATRIUM ALGINAT TERHADAP MUTU SURIMI LELE DUMBO

Alginat merupakan senyawa hidrokoloid yang diekstrak dari rumput laut cokelat dan beredar dalam pasaran dalam bentuk Na-alginat. Na-alginat merupakan bahan tambahan pangan (BTP) yang memiliki fungsi sebagai pengental, pembentuk gel dan penstabil tekstur pada makanan. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan Na-alginat terhadap karakteristik mutu surimi lele dumbo serta rasio penambahan Na-alginat terbaik untuk meningkatkan mutu surimi yang dihasilkan. Rancangan percobaan yang digunakan adalah rancangan acak lengkap (RAL) dengan perlakuan berupa penambahan Na-alginat dengan konsentrasi 0%; 0,2%; 0,4%; 0,6%; 0,8% dan 1,0%. Karakteristik mutu surimi yang diuji pada penelitian ini meliputi uji kenampakan, uji lipat, uji gigit, kekuatan gel, derajat putih, nilai pH, kadar air, kadar abu, kadar protein dan kadar lemak. Hasil penelitian menunjukkan bahwa penambahan Na-alginat terbukti signifikan menurunkan kekuatan gel, uji lipat dan uji gigit serta meningkatkan kadar air pada surimi lele dumbo yang dihasilkan. Penambahan Na-alginat konsentrasi 0,6% menghasilkan kadar air yang terendah yakni 73,80% akan tetapi tidak berbeda nyata dengan Na-alginat konsentrasi 0,4% dengan nilai kadar air sebesar 74,01%.

Kata kunci: surimi, lele dumbo, Na-alginat, kekuatan gel, derajat putih



Abstract

EFFECT OF SODIUM ALGINATE CONCENTRATION ON
THE QUALITY OF SURIMI FROM AFRICAN CATFISH

Alginate is a hydrocolloid compound extracted from brown seaweed and circulating in the market in the form of Na-alginate. Na-alginate is a food additive which has a function as a thickener, gelling agent and texture stabilizer in food. This study aims to determine the effect of the addition of Na-alginate on the quality characteristics of African catfish surimi and the ratio of the best addition of Na-alginate to improve the quality of the resulting surimi. The experimental design used was a completely randomized design (CRD) with treatment in the form of the addition of Na-alginate with a concentration of 0%; 0.2%; 0.4%; 0.6%; 0.8% and 1,0%. The quality characteristics of surimi tested in this study include appearance test, fold test, bite test, gel strength, whiteness, pH value, moisture content, ash content, protein content and fat content. The results showed that the addition of Na-alginate was significantly proven to reduce the strength of the gel, fold test and bite test as well as increase the moisture content of the African catfish surimi. The addition of Na-alginate with a concentration of 0.6% produced the lowest water content, namely 73.80%, but it was not significantly different from Na-alginate with a concentration of 0.4% with a water content value of 74.01%.

Key words: surimi, African catfish, Na-alginate, gel strength, whiteness