

Intisari

PENGARUH KOMBINASI TEPUNG MAIZENA DAN TEPUNG KENTANG TERHADAP NILAI GIZI DAN KESUKAAN KONSUMEN *FISH CAKE* BERBAHAN BAKU SURIMI LELE DUMBO

Lele dumbo merupakan ikan air tawar khas Indonesia yang tumbuh cepat dengan pangsa pasar cukup luas tetapi memiliki nilai ekonomi rendah. Peningkatan nilai ekonomi lele dumbo dapat dikembangkan melalui pengolahan produk antara (surimi) salah satunya *fish cake*. Pada penelitian ini digunakan surimi lele dumbo (dengan penambahan tepung Na-alginat dan CaCl_2 untuk meningkatkan kekuatan gel). Penelitian bertujuan untuk menentukan formulasi tepung maizena dan tepung kentang terbaik pada *fish cake* serta menganalisis mutu produk dan kemunduran mutu selama penyimpanan. Penelitian ini menggunakan rancangan acak lengkap dengan perlakuan formulasi tepung maizena dan kentang masing-masing: 5,9%:0,0% (p0) ; 4,4%:1,5% (p1) ; 2,95%:2,95% (p2) ; 1,5%:4,5% (p3) ; 0%:5,9% (p4). Hasil penelitian menunjukkan bahwa penambahan Na-alginat dan CaCl_2 dapat meningkatkan sifat kekuatan gel ($1.042,8 \text{ g/cm}^2$) ; kadar air (55,48%) ; lemak (4,74%) ; abu (0,6%) dan protein (15,05%). Formulasi tepung maizena dan kentang yang berbeda berpengaruh signifikan terhadap komposisi gizi *fish cake*, dengan rerata kadar air ($43,84 \pm 0,2\%$), lemak ($10,32 \pm 0,57\%$), abu ($1,83 \pm 0,41\%$), dan protein ($11,31 \pm 0,12\%$). Hasil uji kesukaan menunjukkan bahwa perlakuan p1 menghasilkan *fish cake* yang paling disukai panelis (5,41). Nilai kalori produk per takaran saji (2 pcs) sebesar 150 kkal (45 kkal dari 5 gr lemak), 25 kkal dari 6 gr protein dan 80 kkal dari 20 gr karbohidrat. Hasil Uji TPC dan TVB-N menunjukkan *fish cake* aman dikonsumsi hingga penyimpanan 10 hari dengan nilai $1,0 \times 10^5$ dan 10,94 mg/100 gram.

Kata kunci: *fish cake*, komposisi gizi, lele dumbo, surimi, tepung

Abstract

THE EFFECT OF THE COMBINATION OF CORNSTARCH AND POTATO FLOUR ON THE NUTRITIONAL VALUE AND CONSUMER PREFERENCE OF FISH CAKES MADE FROM SURIMI DUMBO CATFISH

Dumbo catfish is a fast-growing freshwater fish native from Indonesia with a relatively wide market share but has low economic value. The economic value of dumbo catfish can be increased through product processing, such as *fish cake*, using the intermediate product (surimi). In this study, dumbo catfish surimi was used (with the addition of Na-alginate and CaCl_2 to enhance gel strength). The research aimed to determine the best formulation of cornstarch and potato flour for *fish cake*, as well as to analyze the product quality and quality deterioration during storage. The study employed a completely randomized design with different formulations of cornstarch and potato flour, respectively: 5,9%:0,0% (p0) ; 4,4%:1,5% (p1) ; 2,95%:2,95% (p2) ; 1,5%:4,5% (p3) ; 0%:5,9% (p4). The results of the research showed that the addition of Na-alginate and CaCl_2 could improve the gel strength (1,042.8 g/cm²); moisture content (55,48%) ; fat (4,74%) ; ash (0,6%) and protein (15,05%). Different formulations of cornstarch and potato flour significantly affected the nutritional composition of *fish cake*, with an average moisture content ($43.4 \pm 0.2\%$), fat ($10.3 \pm 0.41\%$), ash ($1.83 \pm 0.57\%$) , and protein ($11.31 \pm 0.12\%$). The preference test result indicated that treatment p1 produced the most preferred *fish cake* among the panelist (5,41). The calorie value per serving (2 pieces) of the product was 150 kcal (45 kcal from 5g of fat, 25 kcal from 6g of protein and 80 kcal from 20g of carbohydrates). The TPC and TVB-N test results showed that *fish cake* remained safe for consumption for up to 10 days of storage with a values of 1.0×10^5 CFU/gram and 10.94 mg/100 gram.

Keywords : African catfish, *fish cake*, flour, nutritional composition, surimi