

RINGKASAN

SALLU ARDIYANTI. Karakteristik Fisikokimia Tepung Ikan (*Sardinella lemuru* dan *Selaroides leptolepis*). Dibimbing oleh SRI NOVALINA A dan TAUFIK HIDAYAT.

Tepung ikan merupakan sebuah inovasi produk berbasis perikanan bernilai jual tinggi untuk meningkatkan nilai gizi pada suatu produk pangan. Penelitian ini bertujuan untuk menentukan karakteristik fisikokimia tepung ikan (*Sardinella lemuru*) dan (*Selaroides leptolepis*) serta menentukan jenis ikan yang menghasilkan karakteristik terbaik. Metode penelitian meliputi proses pengukusan selama 20 menit, pengovenan selama 6 jam dengan suhu 60°C, penghalusan yang dilakukan selama dua tahap, dan pengayakkan. Parameter uji meliputi analisis proksimat, pH, asam lemak bebas (ALB), analisis warna (L^* , a^* , b^*), kelarutan, serat pangan, rendemen, dan FTIR. Hasil menunjukkan bahwa kedua tepung yang dihasilkan memenuhi standar SNI 2715:2013 Mutu A. Tepung ikan tamban (*S. lemuru*) mengandung protein 71,15%, kadar air 6,55%, kadar abu 13,91%, kadar lemak 7,38%, karbohidrat 1,01%, pH (8,6), ALB 0,4%, kelarutan 25,85%, dan rendemen 18,03%. Tepung ikan selar ekor kuning (*S. leptolepis*) mengandung protein 70,10%, kadar air 7,28%, kadar abu 12,80%, kadar lemak 9,34%, karbohidrat 0,49%, pH (7,8), ALB 0,6%, kelarutan 12,45%, dan rendemen 21,18%. Analisis FTIR pada kedua tepung ikan yang dihasilkan menampilkan adanya kesamaan profil gugus fungsi. Karakteristik fisikokimia kedua tepung ikan yang dihasilkan secara statistik terdapat perbedaan nyata dengan $p < 0,05$. Tepung ikan tamban (*S. lemuru*) unggul dalam hal kandungan protein yang lebih tinggi (71,15%), nilai pH (8,6), serta kelarutan (25,85%). Tepung ikan selar ekor kuning (*S. leptolepis*) menghasilkan rendemen lebih tinggi (21,12%), dan kadar lemak (9,34%). Secara keseluruhan, kedua jenis tepung ikan ini sudah memenuhi standar mutu proksimat yang baik sesuai SNI 2715:2013 tepung ikan.

Kata kunci: Fisikokimia, ikan tamban, ikan selar ekor kuning, tepung ikan

SUMMARY

SALLU ARDIYANTI. Physicochemical Characteristics of Fish Meal (*Sardinella lemuru* and *Selaroides leptolepis*). Supervised by SRI NOVALINA A and TAUFIK HIDAYAT.

Fish meal is a high-value fisheries-based product innovation designed to enhance the nutritional value of food products. This study aims to determine the physicochemical characteristics of meal from *S. lemuru* and *S. leptolepis* and to identify the fish species that produces the best characteristics. The research methods included steaming for 20 minutes, oven-drying for 6 hours at 60°C, grinding in two stages, and sieving. Test parameters included proximate analysis, pH, free fatty acid (FFA), color analysis (L*, a*, b*), solubility, dietary fiber, yield, and FTIR. The result showed that both flours produced met the SNI 2715:2013 Grade A standard. Tamban fish (*S. lemuru*) meal contains 71.15% protein, 6.55% moisture, 13.91% ash, 7.38% fat, 1.01% carbohydrates, pH 8.6, 0.4% FFA, 25.85% solubility, and 18.03% yield. Yellowtail mackerel (*S. leptolepis*) fish meal contains 70.10% protein, 7.28% moisture, 12.80% ash, 9.34% fat, 0.49% carbohydrates, pH 7.8, 0.6% FFA, 12.45% solubility, 21.18% yield. FTIR analysis of the two fish meals produced revealed similarities in functional group profiles. The physicochemical characteristics of the two fish flour proceed showed statistically significant differences at $p < 0.05$. Tamban fish flour (*S. lemuru*) showed superiority in term of higher protein content (71.15%), pH value (8.6), and substantially better solubility (25.85%). Yellowtail scad flour (*S. leptolepis*) yielded a higher recovery rate or yield (21.12%) and fat content of 9.34%. Overall, both types of fish flour met good proximate quality standards based on SNI 2715:2013 fish flour.

Keywords : Fish meal, tamban fish, physical chemistry, yellowtail mackerel