

RINGKASAN

ADINDA FIRANA. Pengembangan Produk Pangan Tiruan *Pemmican* Berbasis Ikan Todak Asap (*Tylosurus Crocodilus*). Dibimbing oleh AIDIL FADLI ILHAMDY, S.Pi, M.Si dan BENNY MANULLANG, S.Pi., M.Si.

Pengembangan produk pangan berbasis sumber daya perikanan lokal merupakan salah satu upaya mendukung diversifikasi pangan sekaligus meningkatkan nilai tambah hasil perikanan. *Pemmican* merupakan pangan padat energi yang secara tradisional dibuat dari daging dan lemak hewani, namun belum banyak dikembangkan menggunakan bahan baku ikan. Ikan todak asap memiliki kandungan protein yang tinggi serta cita rasa khas sehingga berpotensi dimanfaatkan sebagai bahan baku pemmican. Penelitian ini bertujuan menganalisis pengaruh formulasi ikan todak asap terhadap tingkat penerimaan panelis dan karakteristik tekstur, menentukan formulasi terbaik, serta menganalisis karakteristik kimia proksimat formulasi terpilih, serta menganalisis karakteristik kimia pada formulasi terpilih. Penelitian dilaksanakan pada bulan Desember 2025 hingga Mei 2026 di Laboratorium *Marine Product* Universitas Maritim Raja Ali Haji, sedangkan analisis proksimat dilakukan di PT Saraswanti Indo Genetech. Penelitian menggunakan rancangan tiga formulasi, yaitu P1 (44% ikan todak asap dan 25% margarin), P2 (49% ikan todak asap dan 20% margarin), serta P3 (54% ikan todak asap dan 15% margarin). Ikan todak diasapkan, dihaluskan, kemudian dicampurkan dengan margarin, kismis, madu, bubuk bawang putih, dan garam hingga homogen, selanjutnya dicetak dan didiamkan hingga mengeras. Produk yang dihasilkan diuji menggunakan uji hedonik oleh 85 panelis tidak terlatih, *Texture Profile Analysis* (TPA), analisis proksimat, serta perhitungan Angka Kecukupan Gizi (AKG). Data uji hedonik dianalisis menggunakan uji Friedman yang dilanjutkan dengan Wilcoxon apabila berbeda nyata, sedangkan data TPA dianalisis menggunakan One-Way ANOVA dan uji lanjut Tukey HSD pada taraf kepercayaan 95%. Hasil penelitian menunjukkan bahwa perbedaan formulasi memberikan pengaruh nyata terhadap atribut warna, hardness, dan gumminess, tetapi tidak berpengaruh nyata terhadap rasa, aroma, tekstur, penampakan, *cohesiveness*, *springiness*, dan *chewiness*. Formulasi P3 merupakan formulasi terbaik karena memberikan tingkat penerimaan panelis yang baik serta karakteristik tekstur yang lebih optimal. Analisis proksimat pada formulasi terpilih menghasilkan kadar air 30,46%, abu 4,39%, protein 28,52%, lemak 15,11%, karbohidrat 21,53%, dan energi total 336,15 kkal/100 g. Kandungan protein tersebut menunjukkan bahwa pemmican ikan todak asap berpotensi dikembangkan sebagai pangan tinggi protein berbasis sumber daya perikanan lokal.

Kata kunci: Formulasi, Ikan Todak, Pemmican, Pengasapan

SUMMARY

ADINDA FIRANA. Development Of *Pemmican* Imitation Food Products Based On Smoked Hound Needlefish (*Tylosurus crocodilus*). Supervised by AIDIL FADLI ILHAMDY, S.Pi, M.Si and BENNY MANULLANG, S.Pi., M.Si.

The development of food products based on local fishery resources is one of the strategies to support food diversification while increasing the added value of fishery products. Pemmican is a high-energy food traditionally made from dried meat and animal fat; however, its development using fish as the primary raw material remains limited. Smoked hound needlefish (*Tylosurus crocodilus*) is rich in protein and possesses a distinctive smoked flavor, making it a promising raw material for pemmican production. This study aimed to evaluate the effect of smoked hound needlefish formulations on panelists' acceptance and textural characteristics, determine the best formulation, and analyze the proximate chemical characteristics of the selected formulation. The study was conducted from December 2025 to May 2026 at the Marine Product Laboratory, Universitas Maritim Raja Ali Haji, while proximate analysis was performed at PT Saraswanti Indo Genetech. Three formulations were prepared: P1 (44% smoked hound needlefish and 25% margarine), P2 (49% smoked hound needlefish and 20% margarine), and P3 (54% smoked hound needlefish and 15% margarine). The fish was smoked, minced, and mixed with margarine, raisins, honey, garlic powder, and salt until a homogeneous mixture was obtained, then molded and allowed to solidify. The resulting products were evaluated using a hedonic test involving 85 untrained panelists, Texture Profile Analysis (TPA), proximate analysis, and Daily Nutritional Value (AKG) calculation. Hedonic data were analyzed using the Friedman test followed by the Wilcoxon signed-rank test when significant differences were detected, whereas TPA data were analyzed using One-Way Analysis of Variance (ANOVA) followed by Tukey's Honestly Significant Difference (HSD) test at a 95% confidence level. The results showed that formulation significantly affected color, hardness, and gumminess, but had no significant effect on taste, aroma, texture, appearance, cohesiveness, springiness, or chewiness. Formulation P3 was identified as the best treatment because it exhibited good panelist acceptance and more desirable textural characteristics. Proximate analysis of the selected formulation showed moisture, ash, protein, fat, carbohydrate, and total energy contents of 30.46%, 4.39%, 28.52%, 15.11%, 21.53%, and 336.15 kcal/100 g, respectively. The high protein content indicates that smoked hound needlefish pemmican has strong potential to be developed as a high-protein food product based on local fishery resources.

Keywords: Formulation, Hound Needlefish, Pemmican, Smoking