

ABSTRAK

Fadillah Wahyuni: Pengembangan Produk Sosis Dari Ikan Baung (*Hemibagrus nemurus*) dengan Penambahan Daun Torbangun (*Coleus amboinicus lour*) Sebagai Makanan Tambahan Ibu Menyusui. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2026.

Pemberian ASI eksklusif di Indonesia, termasuk di Sumatera Utara, masih belum mencapai target nasional, salah satunya akibat rendahnya produksi ASI yang berkaitan dengan status gizi ibu menyusui. Upaya perbaikan status gizi dapat dilakukan melalui pengembangan makanan tambahan berbasis pangan lokal yang kaya zat gizi dan berpotensi sebagai laktagogum. Ikan baung (*Hemibagrus nemurus*) merupakan sumber protein lokal yang belum dimanfaatkan secara optimal, sedangkan daun torbangun (*Coleus amboinicus lour*) dikenal sebagai tanaman laktagogum yang secara tradisional dikonsumsi oleh ibu menyusui. Namun, pemanfaatan kedua bahan tersebut masih terbatas, dan karakteristik organoleptik serta fisikokimia sosis ikan baung dengan penambahan daun torbangun belum diketahui. Penelitian ini bertujuan untuk memformulasikan sosis ikan baung dengan penambahan daun torbangun, menganalisis karakteristik fisikokimia dan organoleptiknya, menentukan formulasi terbaik berdasarkan hasil De Garmo, serta mengetahui kontribusi kandungan protein formula terpilih terhadap kebutuhan protein ibu menyusui berdasarkan takaran saji.

Penelitian ini dilaksanakan di Laboratorium Gizi Universitas Negeri Medan dan Laboratorium Instrumentasi Fakultas Teknologi Pertanian Universitas Andalas dari bulan Oktober-Desember 2025. Penelitian ini menggunakan empat formulasi yaitu F1 (75 g ikan baung : 0 g daun torbangun), F2 (75 g ikan baung: 1 g daun torbangun), F3 (75 g ikan baung: 2 g daun torbangun), dan F4 (75 g ikan baung: 3 g daun torbangun). Analisis yang dilakukan meliputi uji organoleptik, uji fisikokimia (energi, karbohidrat, protein, lemak, kadar air, kadar abu, total flavonoid, aktivitas antioksidan, dan tekstur), serta penentuan formulasi terbaik menggunakan metode De Garmo.

Hasil uji hedonik dan mutu hedonik menggunakan metode Kruskal-Wallis menunjukkan perbedaan signifikan ($p < 0,05$) pada seluruh parameter yang diamati. Berdasarkan metode De Garmo, formula terbaik adalah F2 (75 g ikan baung : 1 g daun torbangun). Analisis fisikokimia menunjukkan bahwa penambahan daun torbangun meningkatkan kadar protein sebesar 14,35%, kadar abu sebesar 1,58% , total flavonoid sebesar 0.024%, aktivitas antioksidan sebesar 134,06 ppm, dan tekstur sosis sebesar 4,74 N/Cm², serta menurunkan kadar air sebesar 66,26%, sedangkan nilai energi sebesar 132 kkal dan karbohidrat sebesar 17,13% mengalami perubahan antar formulasi. Satu porsi (90 g) formula terpilih mampu memenuhi 15,75% kebutuhan protein harian ibu menyusui usia 19 – 49 tahun pada enam bulan pertama menyusui dan 16,80% pada enam bulan kedua.

Kata kunci: daun torbangun, ibu menyusui, ikan baung, protein, sosis.

ABSTRACT

Fadillah Wahyuni: Development of a Sausage Product from Baung Fish (*Hemibagrus nemurus*) with the Addition of Torbangun Leaves (*Coleus amboinicus* Lour.) as a Supplement for Breastfeeding Mothers. Thesis. Faculty of Engineering, State University of Medan. 2026.

Exclusive breastfeeding in Indonesia, including in North Sumatra, has not yet reached the national target, partly due to low breast milk production related to the nutritional status of breastfeeding mothers. Efforts to improve nutritional status can be made through the development of supplementary foods based on local foods rich in nutrients and potential lactagogic properties. Baung fish (*Hemibagrus nemurus*) is a local protein source that has not been optimally utilized, while torbangun leaves (*Coleus amboinicus* Lour.) are known as lactagogic plants traditionally consumed by breastfeeding mothers. However, the use of both ingredients is still limited, and the organoleptic and physicochemical characteristics of baung fish sausage with the addition of torbangun leaves are unknown. This study aims to formulate a baung fish sausage with the addition of torbangun leaves, analyze its physicochemical and organoleptic characteristics, determine the best formulation based on De Garmo's results, and determine the contribution of the selected formula's protein content to the protein requirements of breastfeeding mothers based on serving size.

This research was conducted at the Nutrition Laboratory of Medan State University and the Instrumentation Laboratory of the Faculty of Agricultural Technology, Andalas University, from October to December 2025. Four formulations were used: F1 (75 g catfish: 0 g torbangun leaves), F2 (75 g catfish: 1 g torbangun leaves), F3 (75 g catfish: 2 g torbangun leaves), and F4 (75 g catfish: 3 g torbangun leaves). Analyses included organoleptic testing, physicochemical tests (energy, carbohydrate, protein, fat, air content, ash content, total flavonoids, antioxidant activity, and texture), and determination of the best formulation using the De Garmo method.

The results of the hedonic and hedonic quality tests using the Kruskal-Wallis method showed significant differences ($p < 0.05$) in all observed parameters. Based on the De Garmo method, the best formulation was F2 (75 g catfish: 1 g torbangun leaves). Physicochemical analysis showed that the addition of torbangun leaves increased protein content by 14.35%, ash content by 1.58%, total flavonoids by 0.024%, antioxidant activity by 134.06 ppm, and sausage texture by 4.74 N/Cm², and reduced air content by 66.26%, while the energy value of 132 kcal and 17.13% changed between formulations. One portion (90 g) of the selected formula was able to meet 15.75% of the daily protein needs of breastfeeding mothers aged 19-49 years in the first six months of breastfeeding and 16.80% in the second six months.

Keywords: torbangun leaves, breastfeeding mothers, catfish, protein, sausage.