

INTISARI

Analisis Karakteristik Fisikokimia dan Tingkat Kesukaan Konsumen *Salt Body Scrub* yang Diperkaya Kolagen Kulit Ikan Nila

Penelitian ini dilatarbelakangi oleh rendahnya pemanfaatan garam krosok yang belum memenuhi standar industri pangan serta meningkatnya limbah kulit ikan nila dari sektor perikanan budidaya, sehingga diperlukan diversifikasi pemanfaatan bahan baku lokal ke sektor non-pangan, salah satunya industri kosmetik. Penelitian ini bertujuan menganalisis pengaruh variasi konsentrasi garam krosok dan penambahan kolagen kulit ikan nila terhadap karakteristik fisikokimia dan tingkat kesukaan konsumen sediaan *salt body scrub* serta menentukan formulasi terbaik. Penelitian dilakukan menggunakan rancangan faktorial dengan variasi konsentrasi garam krosok dan kolagen, dengan parameter pengujian meliputi homogenitas, tipe emulsi, pH, viskositas, daya sebar, daya lekat, stabilitas emulsi, aktivitas antioksidan, efektivitas kelembapan kulit, serta uji hedonik terhadap atribut warna, aroma, tekstur, dan kesukaan keseluruhan. Hasil penelitian menunjukkan bahwa variasi konsentrasi garam krosok dan penambahan kolagen berpengaruh nyata terhadap beberapa parameter fisikokimia dan tingkat kesukaan konsumen, di mana penambahan kolagen cenderung meningkatkan stabilitas fisik, kenyamanan penggunaan, dan efektivitas peningkatan kelembapan kulit. Formulasi P6 menghasilkan karakteristik fisikokimia paling seimbang serta memperoleh nilai kesukaan keseluruhan tertinggi pada uji hedonik dibandingkan formula terpilih lainnya. Dengan demikian, pengembangan *salt body scrub* berbasis garam krosok yang diperkaya kolagen kulit ikan nila berpotensi memberikan nilai tambah bagi garam rakyat dan limbah perikanan serta berpotensi dikembangkan sebagai produk kosmetik berbahan alami yang dapat diterima oleh konsumen.

Kata kunci: garam krosok, kolagen kulit ikan nila, *salt body scrub*, karakteristik fisikokimia, uji hedonik.

ABSTRACT

Analysis of Physicochemical Characteristics and Consumer Preferences of Salt Body *Scrub* Enriched With Tilapia Skin Collagen

This study was motivated by the limited utilization of sea salt that does not meet food industry standards and the increasing amount of Nile tilapia skin waste from aquaculture activities, which encourages diversification of local raw materials into non-food sectors, particularly the cosmetic industry. This study aimed to evaluate the effects of sea salt concentration and the addition of Nile tilapia skin collagen on the physicochemical characteristics and consumer acceptance of salt body scrub formulations and to determine the best formulation. A factorial experimental design was applied using variations in sea salt and collagen hydrolysate concentrations, with evaluated parameters including homogeneity, emulsion type, pH, viscosity, spreadability, adhesiveness, emulsion stability, antioxidant activity, skin moisturizing effectiveness, and hedonic attributes of color, aroma, texture, and overall preference. The results showed that variations in sea salt concentration and collagen addition significantly affected several physicochemical properties and consumer acceptance, in which collagen incorporation tended to improve physical stability, application comfort, and skin moisturizing effectiveness. Formulation P6 exhibited the most balanced physicochemical characteristics and achieved the highest overall preference score among the selected formulations. Overall, this study demonstrates that sea salt enriched with Nile tilapia skin collagen has strong potential to be developed as a natural salt body scrub product with favorable quality attributes and good consumer acceptance.

Keywords: sea salt, Nile tilapia skin collagen hydrolysate, salt body *scrub*, physicochemical characteristics, hedonic test.