FORMULASI DAN UJI SIFAT FISIK SEDIAAN *FACE TONER* HASIL PEMANFAATAN LIMBAH EKSTRAK KULIT BUAH NANAS (*Ananas comosus* (L.) *Meer*) DENGAN HUMEKTAN : PROPILEN GLIKOL DAN GLISERIN

ABSTRAK

Kulit buah nanas (Ananas comosus (L.) Merr) merupakan limbah pertanian yang jumlahnya melimpah. Pemanfaatan kulit buah nanas hingga kini masih terbatas, padahal bagian ini kaya akan senyawa bioaktif berupa bromelin, vitamin C, flavonoid, dan tanin yang memiliki potensi sebagai bahan kosmetik. Penelitian ini bertujuan memformulasikan face toner berbahan ekstrak kulit nanas dengan variasi humektan propilen glikol dan gliserin, serta mengevaluasi sifat fisik, stabilitas, keamanan, dan tingkat penerimaan konsumen. Ekstrak diperoleh dengan metode maserasi menggunakan etanol 96% dan diformulasikan ke dalam tujuh formula (F1–F7). Evaluasi meliputi uji organoleptik, homogenitas, pH, viskositas, stabilitas dengan cycling test, uji iritasi kulit, serta uji hedonik oleh panelis. Hasil penelitian menunjukkan bahwa seluruh formula berbentuk cair, berwarna kuning muda, berbau khas, homogen, serta stabil selama penyimpanan. Nilai pH berada dalam rentang fisiologis kulit (4,5–6,5), viskositas sesuai karakteristik sediaan cair, dan tidak menimbulkan reaksi iritasi pada panelis. Uji hedonik mengindikasikan bahwa formula F3 (propilen glikol 15%) dan F7 (kombinasi propilen glikol 10% + gliserin 10%) mendapat tingkat kesukaan tertinggi dari aspek warna, tekstur, dan aroma. Kesimpulannya, ekstrak kulit nanas dapat dimanfaatkan sebagai bahan aktif face toner yang stabil, aman, serta memiliki potensi diterima konsumen, sekaligus memberi nilai tambah pada limbah pertanian.

Kata kunci: *face toner*, ekstrak kulit nanas, propilen glikol, gliserin, stabilitas, hedonik

FORMULATION AND TESTING OF PHYSICAL PROPERTIES OF *FACE TONER* PREPARATIONS RESULTING FROM THE UTILIZATION OF PINEAPPLE (*Ananas comosus* (L.) *Meer*) PEEL EXTRACT WASTE WITH HUMECTANTS: PROPYLENE GLYCOL AND GLYCERIN

ABSTRACT

Pineapple peel (Ananas comosus (L.) Merr) is an abundant agricultural waste. Its utilization remains limited, yet this part contains various bioactive compounds such as bromelain, vitamin C, flavonoids, and tannins that have potential as cosmetic ingredients. This study aimed to formulate a face toner made from pineapple peel extract with variations of humectants, namely propylene glycol and glycerin, as well as to evaluate its physical properties, stability, safety, and consumer acceptance. The extract was obtained through maceration using 96% ethanol and formulated into seven formulas (F1–F7). Evaluation included organoleptic test, homogeneity, pH, viscosity, stability through cycling test, skin irritation test, and hedonic test by panelists. The results showed that all formulas were liquid, light yellow, had a characteristic odor, were homogeneous, and stable during storage. The pH values were within the physiological range of the skin (4.5–6.5), viscosity was consistent with liquid dosage forms, and no irritation reaction was observed on panelists. Hedonic testing indicated that formula F3 (15% propylene glycol) and F7 (a combination of 10% propylene glycol + 10% glycerin) received the highest acceptance levels in terms of color, texture, and aroma. In conclusion, pineapple peel extract can be utilized as an active ingredient in a face toner that is stable, safe, and potentially well-accepted by consumers, while also providing added value to agricultural waste.

Keywords: *face toner*, pineapple peel extract, propylene glycol, glycerin, stability, hedonic