FORMULASI DAN EVALUASI SEDIAAN TINTED LIPBAM KOMBINASI EKSTRAK UMBI BIT (*Beta vulgaris* L.) DAN MINYAK ALPUKAT (*Avocado oil*)

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ABSTRAK

Penggunaan bahan alami dalam kosmetik semakin berkembang. Umbi bit (*Beta vulgaris L.*) mengandung pigmen betasianin yang berpotensi sebagai pewarna alami, sedangkan minyak alpukat berfungsi sebagai emolien dan pelembap. Penelitian ini bertujuan memformulasikan dan mengevaluasi tinted lip balm kombinasi ekstrak umbi bit dan minyak alpukat. Penelitian dilakukan secara eksperimental laboratorium. Ekstrak umbi bit diperoleh dengan metode maserasi menggunakan etanol 96% v/v dengan rendemen 11,839% b/b. Tinted lip balm dibuat dalam empat formula dengan konsentrasi ekstrak 0% b/b, 3% b/b, 5% b/b, dan 7% b/b, sedangkan minyak alpukat 27% b/b. Evaluasi meliputi organoleptis, homogenitas, daya sebar, daya lekat, kekerasan, stabilitas, iritasi, dan hedonik. Hasil menunjukkan seluruh formula memiliki karakteristik fisik yang baik, homogen, tidak menyebabkan iritasi, dan memenuhi persyaratan sediaan semisolid tipe stick. Daya sebar, daya lekat dan kekerasan tidak menunjukkan perbedaan signifikan. Formula F4 (7% ekstrak) b/b paling disukai dari segi warna dan tekstur. Pada penyimpanan 25°C dan 40°C, F3 dan F4 mengalami perubahan warna, sedangkan seluruh formula stabil pada *cycling test.*

Kata kunci : *tinted lip balm*, ekstrak umbi bit, *Beta vulgaris L.*, minyak alpukat, stabilitas.

Formulation And Evaluation Of Tinted Lipbalm Preparations Combining Beetroot Extract (Beta Vulgaris L) And Avocado Oil

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ABSTRACT

The use of natural ingredients in cosmetics is increasingly expanding. Beetroot (Beta vulgaris L.) contains betacyanin pigments with potential as natural colorants, while avocado oil acts as an emollient and moisturizer. This study aimed to formulate and evaluate a tinted lip balm combining beetroot extract and avocado oil. The research was conducted using an experimental laboratory approach. Beetroot extract was obtained via maceration using 96% v/v ethanol, yielding 11.839% w/w. Four tinted lip balm formulas were prepared with extract concentrations of 0% w/w, 3% w/w, 5% w/w, and 7% w/w, while the avocado oil concentration remained constant at 27% b/b. Evaluations covered organoleptic properties, homogeneity, spreadability, adhesiveness, hardness, stability, irritation potential, and hedonic attributes. The results indicated that all formulas possessed good physical characteristics, were homogeneous, caused no irritation, and met the requirements for stick-type semi-solid preparations. Spreadability, adhesiveness, and hardness did not show significant differences. Formula F4 (7% extract) w/w was the most preferred in terms of color and texture. Upon storage at 25°C and 40°C, F3 b/b and F4 b/b exhibited color changes, whereas all formulas remained stable during the cycling test.

Keywords: *tinted lip balm, beetroot extract, Beta vulgaris L., avocado oil, stability.*