

## ABSTRAK

Vironica, Indah 2021. *Pengaruh Konsentrasi Emulgator Asam Stearat Dan Trietanolamin Terhadap Mutu Fisik Sediaan Krim Daun Bidara (Ziziphus Mauritiana L.)*. Karya Tulis Ilmiah. Akademi Farmasi Putra Indonesia Malang. Pembimbing: Dr. apt. Bilal Subchan Agus Santoso, M.Farm.

Kata Kunci : Asam Stearat Dan Trietanolamin, Ekstrak Daun Bidara, Mutu Fisik Sediaan Krim.

Daun bidara sebagian besar mengandung senyawa golongan saponin, flavonoid, steroid dan tannin ini juga dipercaya memiliki aktivitas sebagai antibakteri, antiseptik, anti jamur, anti inflamasi. Untuk memudahkan masyarakat dalam menggunakan daun bidara maka dibuat sediaan krim dengan tipe krim minyak dalam air (M/A). Salah satu bahan yang sering digunakan dalam sediaan krim tipe (M/A) yaitu asam stearat dan trietanolamin. Tujuan dari penelitian ini untuk mengetahui adanya pengaruh konsentrasi emulgator asam stearat dan TEA terhadap mutu fisik krim ekstrak daun bidara. Krim ekstrak daun bidara diformulasikan dengan perbandingan konsentrasi trietanolamin dan asam stearat FI (2% : 6%) dan FII (3% : 12%). Daun bidara diekstraksi dengan metode maserasi menggunakan etanol 96%. Diperoleh rendemen ekstrak sebesar 32,11 %. Hasil uji mutu fisik krim ekstrak daun bidara pada uji organoleptis berwarna coklat muda, beraroma khas, bentuk semisolid dan homogen. Hasil uji pH sediaan memenuhi syarat. Hasil uji daya sebar memenuhi syarat. Hasil uji daya lekat memenuhi syarat. Hasil uji viskositas memenuhi syarat. Hasil uji *Independent Sample t-Test* menunjukkan tidak terdapat pengaruh terhadap pH, daya sebar, daya lekat dan viskositas. Perbandingan konsentrasi asam stearat dan trietanolamin tidak terdapat pengaruh yang signifikan terhadap mutu fisik sediaan krim.

## ABSTRACT

*Vironica, Indah 2021. Effect of Stearic Acid and Triethanolamine Emulgator Concentration on Physical Quality of Bidara Leaf Cream (Ziziphus Mauritiana L.). Scientific papers. Pharmacy Academy of Putra Indonesia Malang. Advisor: Dr. apt. Bilal Subchan Agus Santoso, M.Farm.*

**Keywords:** Stearic Acid and Triethanolamine, Bidara Leaf Extract, Physical Quality of Cream Preparation.

Bidara leaves are high in saponins, flavonoids, steroids, and tannins, which are thought to have antibacterial, antiseptic, antifungal, anti-inflammatory. Cream preparations with the kind of oil-in-water (O/W) cream are used to make it easier for people to use bidara leaves. Stearic acid and triethanolamine are two components that are frequently utilized in the manufacture of cream type (O/W). The goal of this study was to see how different emulsifier concentrations of stearic acid and TEA affected the physical quality of bidara leaf extract cream (*Zhiziphus mauritiana* L.). Bidara leaf extract cream is formulated with a ratio of triethanolamine and stearic acid concentrations of FI (2% : 6%) and FII (3% : 12%). Bidara leaves were extracted with 96 percent ethanol using the maceration process. The yield of the extract was 32.11 percent. On the organoleptic test, the physical quality test of bidara leaf extract cream revealed that it was light brown in color, had a distinct scent, and was semisolid and uniform in texture. The preparation's pH test findings were in compliance with the specifications. The dispersion test results meet the standards. The adhesion test results meet the standards. The findings of the viscosity test are satisfactory. The Independent Sample t-Test revealed that pH, dispersion, adhesion, and viscosity were all unaffected. The physical quality of cream products did not differ significantly when stearic acid and triethanolamine amounts were compared.