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**FORMULASI SEDIAAN KRIM ANTIOKSIDAN EKSTRAK ETANOL
LABU KUNING (*Cucurbita moschata* Duch)**

(xvii + 172 halaman + 25 gambar + 24 tabel + 30 lampiran)

ABSTRAK

Latar belakang: Antioksidan merupakan senyawa yang bereaksi dengan radikal bebas dan mendonorkan elektron sehingga radikal bebas menjadi stabil. Buah labu kuning (*Cucurbita moschata* Duch) berpotensi sebagai antioksidan memiliki senyawa flavonoid dapat membentuk radikal fenoksi yang stabil pada proses oksidasi. Ekstrak buah labu kuning dibuat sediaan krim antioksidan. Penelitian ini bertujuan untuk mengevaluasi karakteristik fisik dan stabilitas mekanik krim ekstrak buah labu kuning dengan variasi konsentrasi ekstrak 0,04%, 0,1%, 0,16%, serta aktivitas antioksidan sediaan yang dinyatakan dalam nilai IC₅₀.

Metode: Penelitian ini menggunakan metode eksperimental laboratorium. Sediaan krim dibuat dengan variasi konsentrasi ekstrak sebesar 0,04% (F1), 0,1% (F2), 0,16% (F3). Uji aktivitas antioksidan dilakukan menggunakan metode ABTS. Analisis data dilakukan dengan SPSS 23.

Hasil: Hasil evaluasi sediaan krim yaitu uji organoleptis berbau khas, bentuk semi padat, tidak berasa, warna formula I putih kekuningan, formula II kuning cerah, formula III kuning, uji homogenitas homogen, tipe krim (M/A), pH 6, viskositas (3.600-12.120 cP), daya sebar (4,5-6,5 cm), daya lekat (4,6-6,8 detik), daya proteksi (2,1-5,6detik), uji stabilitas mekanik krim tidak memisah. Nilai IC₅₀ ekstrak buah labu kuning sebesar 61,90 ppm (kuat), krim formula I 74,57 ppm (kuat), formula II 65,27 ppm (kuat), krim formula III 63,4 ppm (kuat), larutan pembanding vitamin C 4,46 ppm (sangat kuat).

Kesimpulan: Krim ekstrak buah labu kuning memiliki mutu fisik dan stabilitas mekanik yang baik dan memenuhi syarat. Krim buah labu kuning dengan variasi konsentrasi ekstrak 0,04%, 0,1%, 0,16% memiliki nilai IC₅₀ sebesar 74,57 ppm, 65,27 ppm, 63,42 ppm serta konsentrasi ekstrak paling efektif sebagai antioksidan adalah 0,16% (F3).

Kata kunci: Antioksidan, Buah labu kuning, ABTS, Krim

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**PREPARATION FORMULATION OF ANTIOXIDANT CREAM AND
YELLOW PUMP ETHANOL EXTRACT (*Cucurbita moschata Duch*)**

(xvii + 172 pages + 25 pictures + 24 tables + 30 attachment)

ABSTRACT

Background: Antioxidants are compounds that react with free radicals and donate electrons so that free radicals become stable. Pumpkin fruit (*Cucurbita moschata Duch*) has the potential as an antioxidant which has flavonoid compounds that can form stable phenoxy radicals in the oxidation process. Pumpkin fruit extract was prepared as an antioxidant cream. This study aims to evaluate the physical characteristics and mechanical stability of pumpkin extract cream with various extract concentrations of 0.04%, 0.1%, 0.16%, as well as the antioxidant activity of the preparation expressed in IC₅₀ values.

Methods: This research uses laboratory experimental methods. Cream preparations were made with various extract concentrations of 0.04% (F1), 0.1% (F2), 0.16% (F3). The antioxidant activity test was carried out using the ABTS method. Data analysis was performed with SPSS 23.

Result: The results of the evaluation of cream preparations were organoleptic test with a characteristic odor, semi-solid form, tasteless, color of formula I yellowish white, formula II bright yellow, formula III yellow, homogeneity test, type of cream (W/A), pH 6, viscosity (3,600).). -12.120 cP), dispersion (4.5-6.5 cm), adhesion (4.6-6.8 seconds), protection power (2.1-5.6 seconds), the cream mechanical stability test was not separated. The IC₅₀ value of pumpkin fruit extract is 61.90 ppm (strong), cream formula I 74.57 ppm (strong), formula II 65.27 ppm (strong), cream formula III 63.4 ppm (strong), vitamin comparison solution C 4.46 ppm (very strong).

Conclusion: Pumpkin fruit extract cream has good physical quality and mechanical stability and meets the requirements. Pumpkin cream with various extract concentrations of 0.04%, 0.1%, 0.16% has IC₅₀ values of 74.57 ppm, 65.27 ppm, 63.42 ppm and the concentration of the most effective extract as an antioxidant is 0, 16% (F3).

Keywords : Antioxidant, Pumpkin Fruit, ABTS, Cream