

INTISARI

KUNCORO, D.T.S, 2015, UJI AKTIVITAS ANTIOKSIDAN SEDIAAN KRIM EKSTRAK ETANOL DAUN SIRSAK (*Annona Muricata L.*) TERHADAP RADIKAL BEBAS DPPH (1,1 Diphenyl-2-picrylhydrazil), SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Antioksidan merupakan senyawa penting yang digunakan untuk menjaga kesehatan dan melindungi tubuh dari efek negatif radikal bebas. Flavonoid yang berasal dari tanaman daun sirsak (*Annona Muricata L.*) dapat digunakan sebagai antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi ekstrak etanol daun sirsak terhadap stabilitas fisik krim dan aktivitas antioksidannya.

Daun sirsak diekstraksi dengan metode maserasi menggunakan etanol 70%. Krim dibuat dalam 5 formula di mana Formula 1, 2, dan 3 masing-masing mengandung ekstrak sebanyak 6%, 9%, dan 12%. Formula 4 merupakan kontrol positif (krim rutin) dan formula 5 merupakan kontrol negatif (krim tanpa zat aktif). Aktivitas antioksidannya diuji dengan metode DPPH, serta diamati stabilitas mutu fisiknya yang meliputi homogenitas, daya sebar, daya lekat, viskositas, pH, dan tipe krim.

Hasil penelitian menunjukkan bahwa ekstrak etanolik daun sirsak memiliki aktivitas antioksidan dengan nilai IC_{50} 368,97 ppm dan dapat dibuat sediaan krim. Hasil uji Aktivitas antioksidan ekstrak dalam krim menunjukkan IC_{50} formula 1, 2, dan 3 berturut-turut adalah 616,60 ppm, 575,43 ppm dan 407,38 ppm. Hasil uji aktivitas antioksidan krim ekstrak etanol daun sirsak menunjukkan perbedaan bermakna selama penyimpanan 21 hari.

Kata kunci : Ekstrak etanolik daun sirsak, krim, uji stabilitas fisik, uji aktivitas antioksidan

ABSTRACT

KUNCORO, D.T.S., 2015, ANTIOXIDANT ACTIVITY OF CREAM OF *Annona muricata* L. LEAF ETHANOLIC EXTRACT ON FREE RADICALS DPPH (1.1 Diphenyl-2 picrylhydrazil), THESIS, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.

Antioxidant is an important compound that has been used to maintain of health and protect against of negative effects from free radical. Flavonoid from *Annona muricata* L. leaf can be used as antioxidant. The aim this research is to know variation concentration effect of turmeric ethanolic extract in cream formulation to the physical stability and antioxidant activity..

The *Annona Muricata* L leaf was extracted by maceration method using ethanol 70% (b/v). Cream was prepared using 5 formulations i.e. Formula 1 (F1), Formula 2 (F2), and Formula 3 (F3) containing of 6, 9, and 12% (b/v) of *Annona muricata* L. leaf ethanolic extract, respectively. Formula 4 (F4) was consisting of rutin 1% as positive control, and Formula 5 (F5) as negative control. The antioxidant activity testing was conducted using DPPH method. The homogeneity, spread ability, adhesion, viscosity, pH, and type of cream were conducted as physical inspections of cream.

The results showed that ethanol extract of *Annona Muricata* L leaf cream The antioxidant activity of *Annona Muricata* L. with IC_{50} of 368.97 ppm and can be made preparations cream. The Result from antioxidant activity shows IC_{50} of formula 1, 2, and 3 straight up is 616,60 ppm, 575,43 ppm, and 407,38 ppm respectively. ethanolic extract showed that significant difference during 21 days storage.

Keywords: ethanolic extract of *Annona Muricata* L., cream, physical stability test, test the antioxidant activity