

INTISARI

ISTIQQOMAH, N.A., 2019, UJI AKTIVITAS ANTIOKSIDAN LOTION EKSTRAK ETANOL DAUN KERSEN (*Muntingia calabura* L.) DENGAN METODE DPPH (1,1-difenil-2-pikrilhidrazil), SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.

Daun kersen (*Muntingia calabura* L.) diketahui mengandung flavonoid, fenolik dan saponin. Senyawa flavonoid memiliki aktivitas sebagai antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh variasi ekstrak etanol daun kersen (*Muntingia calabura* L.) terhadap aktivitas antioksidan serta stabilitas mutu fisik sediaan *lotion*.

Ekstrak etanol daun kersen (*Muntingia calabura* L.) diperoleh dengan metode maserasi menggunakan etanol 70%. Sediaan *lotion* dibuat dalam 5 formula yaitu formula 1 (kontrol negatif), formula 2,3,4 (*lotion* dengan ekstrak sebanyak 10%, 15% dan 20%), dan formula 5 (kontrol positif). Penentuan aktivitas antioksidan dilakukan dengan metode DPPH dengan menghitung nilai *IC50*. Selain itu juga dilakukan uji mutu fisik meliputi uji organoleptis, homogenitas, viskositas, daya sebar, uji tipe krim, daya lekat, pH dan stabilitas *cycling test*.

Hasil penelitian menunjukkan bahwa ekstrak etanol daun kersen (*Muntingia calabura* L.) memiliki aktivitas antioksidan dengan *IC50* 43,003 ppm. Formula *lotion* ekstrak daun kersen (*Muntingia calabura* L.) yang memiliki aktivitas dari yang paling besar berturut-turut adalah formula 4, 3, 2 dengan nilai *IC50* 206,126 ppm, 223,703 ppm, 314,458 ppm. Hasil tersebut menunjukkan bahwa variasi konsentrasi ekstrak etanol daun kersen (*Muntingia calabura* L.) dapat mempengaruhi aktivitas antioksidan sediaan *lotion*.

Kata kunci: antioksidan, DPPH, ekstrak etanol daun kersen, *lotion*.

ABSTRACT

ISTIQOMAH, N.A., 2019, ANTIOXIDANT ACTIVITY LOTION OF KERSEN LEAVES (*Muntingia calabura* L.) ETHANOL EXTRACT WITH DPPH (1,1-diphenyl-2-pikrihydrazil) METHODE, SKRIPSI, FACULTY OF PHARMACEUTICAL, SETIA BUDI UNIVERSITY, SURAKARTA.

Kersen leaves (*Muntingia calabura* L.) contain flavonoids, phenolics and saponins. Flavonoids compounds have antioxidant activity. This study aims to determine the effect of variations in ethanol extract of kersen leaves (*Muntingia calabura* L.) toward antioxidant activity and the stability of the physical quality of lotion formula.

The ethanol extract of kersen leaf (*Muntingia calabura* L.) was obtained by maceration method using ethanol 70%. Lotion formula was made in 5 formulas are formula 1 (negative control), formula 2,3,4 (contained extract of 10%, 15% and 20%), and formula 5 (positive control). Determination of antioxidant activity was carried out by the DPPH method by calculating the IC₅₀ value. Lotion formula are also carried out, physical quality tests include organoleptic tests, homogeneity, viscosity, dispersion, cream type test, adhesion, pH and cycling test stability.

The results showed that the extract ethanol of kersen leaves (*Muntingia calabura* L.) had antioxidant activity with IC₅₀ 43,003 ppm. Lotion formula extract ethanol of kersen leaves (*Muntingia calabura* L.) which has stongest antioxidant activity then followed by formula 4, 3, 2 with IC₅₀ 206.126 ppm, 223.703 ppm, 314.458 ppm. Based on results indicate that variations in the concentration of ethanol extract of kersen leaves (*Muntingia calabura* L.) can affect the antioxidant activity of lotion formula.

Keywords: antioxidant, DPPH, extract ethanol of kersen leaves (*Muntingia calabura* L.), lotion.