

**ANALISIS KADAR SAPONIN DAN UJI AKTIVITAS
ANTIOKSIDAN EKSTRAK METANOL DAUN SIRSAK (*Annona
muricata L.*)**

SETIYANINGSIH

ABSTRAK

Tanaman sirsak telah digunakan sebagai pengobatan sejak dahulu dan mengandung berbagai senyawa aktif yang memiliki aktivitas antioksidan seperti tanin, flavonoid, polifenol dan saponin. Penelitian ini bertujuan untuk menganalisis kadar saponin dalam ekstrak daun sirsak (*Annona muricata L*) menggunakan metode gravimetri, serta mengetahui aktivitas antioksidan senyawa saponin terhadap radikal bebas DPPH (*1,1-diphenyl-2-picrylhidrazyl*). Parameter yang diuji adalah kadar saponin yang diuji menggunakan metode gravimetri, serta daya hambatnya terhadap radikal bebas yang diuji menggunakan metode DPPH (*1,1-diphenyl-2-picrylhidrazyl*). Hasil analisis kadar saponin menunjukkan bahwa kadar rata-rata saponin sebesar 9,71%. Aktivitas antioksidan senyawa saponin dari ekstrak metanol daun sirsak terhadap radikal bebas DPPH (*1,1-diphenyl-2-picrylhidrazyl*) menunjukkan nilai IC₅₀ 1,68 µg/ml. Berdasarkan nilai tersebut saponin dari ekstrak metanol daun sirsak termasuk dalam kategori antioksidan yang sangat kuat.

Kata Kunci : *daun sirsak, saponin, gravimetri, DPPH, antioksidan.*

**ANALYSIS OF SAPONIN LEVELS AND ANTIOXIDANT ACTIVITY
TEST OF SOURSOUP LEAF (*Annona muricata* L.) METHANOL
EXTRACT**

SETIYANINGSIH

ABSTRACT

*Soursop plants have been used as medicine for a long time and contain various active compounds that have antioxidant activity such as tannins, flavonoids, polyphenols and saponins. This study aims to analyze the levels of saponins in soursop leaf extract (*Annona muricata* L) using the gravimetric method, and to determine the antioxidant activity of saponin compounds against DPPH (1,1-diphenyl-2-picrylhydrazyl) free radicals. The parameters tested were the levels of saponins which were tested using the gravimetric method, as well as their inhibition against free radicals which were tested using the DPPH (1,1-diphenyl-2-picrylhydrazyl) method. The results of the analysis of saponin levels showed that the average level of saponins was 9.71%. The antioxidant activity of saponin compounds from methanol extract of soursop leaves against DPPH (1,1-diphenyl-2-picrylhydrazyl) free radicals showed an IC₅₀ value of 1,68 ppm. Based on this value, saponins from soursop leaf methanol extract are included in the category of very strong antioxidants.*

Keywords : *soursoup leaf, saponins, gravimetric, DPPH, antioxidant.*