# ABSTRAK

## PENENTUAN KADAR FLAVANOID TOTAL DAN UJI AKTIVITAS ANTIOKSIDAN EKSTRAK ETANOL DAUN BANDOTAN (Ageratum. conyzoides L )

*Qori Amrirullah, Warsinah, Sri Sutji Susilowati*

**Latar Belakang:** Ageratum conyzoides L. atau "Bandotan" termasuk dalam salah satu tumbuhan yang memiliki khasiat sebagai obat. Tumbuhan ini memiliki banyak manfaat salah satunya sebagai antioksidan. Flavonoid memiliki berbagai khasiat salah satunya sebagai antioksidan. Efek antioksidan pada tanaman terutama disebabkan oleh senyawa fenolik, salah satunya flavonoid.. Penelitian ini bertujuan untuk menentukan kadar flavonoid total dan uji aktivitas antioksidan ekstrak etanol daun bandotan (*Ageratum. conyzoides L* ).

**Metodologi:** Ekstrak etanol daun Bandotan dilakukan fraksinasi terlebih dahulu kemudian di identifikjasi menggunakan metode KTL untuk melihat adanya kandungan Flavanoid di dalamnya. Kandungan flavonoid total pada ekstrak etanol daun bandotan dan fraksinya dilihat dengan metode spektrofotometri UV-Vis dan uji aktivitas antioksidan dengan metode DPPH (1,1-Difenil-2-Pikrilhidrazil).. Hasil absorbansi flavonoid total dan uji aktivitas antioksidan kemudian dianalisis menggunakan regresi linear untuk mengetahui besaran kandungan yang didapat.

**Hasil Penelitian:** Kadar flavonoid total pada ekstrak etanol daun bandoran didapatkan sebesar 17.978%. Fraksi n-Heksan, kloroform, Etil Asetat, dan residual masing masing memiliki kadar Flavanoid total sebesar 3.906%, 8.86%, 27.54 %. 7.54%. Aktivitas antioksidan ekstrak etanol daun bandotan diketahui dengan nilai $IC_{50}$ sebesar 6.49 ppm, Fraksi n-Heksan 12.65 ppm, Fraksi Kloroform 6.55 ppm, Residual 9.22 ppm, kemudian Fraksi Etil Asetat nilai 1.78 ppm.

**Kesimpulan:** Fraksi Etil Asetat mempunyai kadar flavaoid paling besar dan aktivitas antioksidan paling besar diantara lainnya.

**Kata Kunci:** Bandotan, flavanoid total, aktivitas antioksidan

# ABSTRACT


## DETERMINATION OF TOTAL FLAVANOID LEVELS AND ANTIOXIDANT ACTIVITY TESTING ETHANOL EXTRACT OF BANDOTAN LEAF (*Ageratum. conyzoides L* )

*Qori Amrirullah, Warsinah, Sri Sutji Susilowati*

**Background:** *Ageratum conyzoides L*. or "Bandotan" is one of the plants that has medicinal properties. This plant has many benefits, one of which is as an antioxidant. Flavonoids have various properties, one of which is as an antioxidant. The antioxidant effect on plants is mainly due to phenolic compounds, one of which is flavonoids. This study aims to determine the total flavonoids and test the antioxidant activity of the ethanol extract of bandotan leaves (*Ageratum. conyzoides L*).

**Methods:** The ethanol extract of Bandotan leaves was first fractionated and then identified using the KTL method to see the presence of flavonoids in it. The total flavonoid content in the ethanol extract of bandotan leaves and their fractions was seen by UV-Vis spectrophotometry method and antioxidant activity test by DPPH method (1,1-Diphenyl-2-Pikrylhydrazil). The results of total flavonoid absorbance and antioxidant activity test were then analyzed using linear regression. to determine the amount of content obtained.

**Results:** Total flavonoid content in bandoran leaf ethanol extract was 17.978%. The n-hexane, chloroform, ethyl acetate, and residual fractions each had total flavonoid content of 3.906%, 8.86%, 27.54%. 7.54%. Antioxidant activity of ethanol extract of bandotan leaves is known with $IC_{50}$ value of 6.49 ppm, n-Hexane fraction 12.65 ppm, Chloroform fraction 6.55 ppm, Residual 9.22 ppm, then Ethyl Acetate Fraction with a value of 1.78 ppm.

**Conclusion:** The Ethyl Acetate Fraction has the highest flavaoid content and the greatest antioxidant activity among others.



**Keywords:** Bandotan, total flavonoid content, antioxidant activity


.