



ChemTech

## International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555  
Vol.12 No.05, pp 258-262, 2019

### **Antibacterial Activity Test Ethanol Extract Leaf *Ageratum conyzoides* Linn against *Staphylococcus aureus* and *Escherichia coli* Bacteria**

Santi Nur Handayani\*, Maylani Permata Saputri<sup>1</sup>,  
Riani Utami<sup>2</sup>, Jasmine Fadhila<sup>3</sup>

\*Jenderal Soedirman University, Chemistry Departement, Faculty of Science and  
Mathematic, Indonesia.

<sup>1</sup>Jenderal Soedirman University, Chemistry Departement, Faculty of Science and  
Mathematic, Indonesia.

<sup>2</sup>Jenderal Soedirman University, Mathematic Departement, Faculty of Science and  
Mathematic, Indonesia.

<sup>3</sup>Jenderal Soedirman University, Physics Departement, Faculty of Science and  
Mathematic, Indonesia.

Street Dr.Soeparno, Karang Wangkal, Purwokerto, Central Java, Indonesia.  
Postal code: 53123

**Abstract :** *Ageratum conyzoides* Linn (Bandotan) which is known as a weed plant can be used as a traditional medicine. The ethanol extract of *A. conyzoides* leaf contains secondary metabolite compounds, like flavonoids, alkaloids, and antibacterial saponins. The aim of this research is to test the antibacterial activity of ethanol extract of *A. conyzoides* leaf. The first step of the analysis is extracting secondary metabolite compounds with 96% ethanol solvent and tested their antibacterial activity against *Staphylococcus aureus* and *Escherichia coli* by jell diffusion Kirby-Bauer method to know their inhibitory activity. The inhibitory activity at concentrations of 200 mg/ml, 150 mg/ml, 100 mg/ml, 5 mg/ml against *S. aureus* and *E. coli* were 8.7mm, 7.1mm, 7.9mm, 6.64mm, and 10.9 mm, 7.8mm, 7.33mm, 6.89mm. The results show us that ethanol extract of *A. conyzoides* leaf has antibacterial activity against *S.aureus* and *E.coli* in medium category.

**Keywords :** *A. conyzoides* leaf, ethanol, Kirby bauer, *Staphylococcus aureus*, *Escherichia coli*.

Santi Nur Handayani *et al* //International Journal of ChemTech Research, 2019,12(5): 258-262.

DOI= <http://dx.doi.org/10.20902/IJCTR.2019.120529>

\*\*\*\*\*