

PENGARUH EKSTRAK ETANOL DAUN CENGKEH (*Syzygium aromaticum*)  
TERHADAP PERTUMBUHAN BAKTERI *Aggregatibacter actinomycetemcomitans*

Adisty Maulida Umamity<sup>1</sup>, Ana Hidayati Mukarohmah<sup>2</sup>, Sri Sinto Dewi<sup>3</sup>

1. Program Studi DIV Analis Kesehatan Fakultas Ilmu Keperawatan Dan Kesehatan universitas Muhammdiyah Semarang
2. Laboratorium Kimia Fakultas Ilmu Keperawatan Dan Kesehatan Universitas Muhammdiyah Semarang
3. Laboratorium Mikrobiologi Fakultas Ilmu Keperawatan Dan Kesehatan Universitas Muhammdiyah Semarang

**ABSTRAK**

Daun cengkeh merupakan salah satu tanaman yang berkhasiat sebagai obat herbal alami. Daun cengkeh memiliki kandungan senyawa flavoid, tanin, saponin, dan eugenol yang bersifat antimikroba. Tujuan penelitian menganalisis perbedaan zona hambat variasi konsentrasi ekstrak etanol daun cengkeh. Penelitian secara eksperimental dengan metode difusi sumuran dan tahapan peremajaan bakteri *A. actinomycetemcomitans* dengan menggunakan media MHA. Hasil diameter zona hambat ekstrak etanol daun cengkeh dengan variasi konsentrasi 100, 150, 200, dan 250 <sup>mg</sup>/<sub>ml</sub> didapatkan hasil berturut-turut yaitu 16,16 mm, 17,00 mm, 18,16 mm, dan 18,83 mm, zona hambat ekstrak etanol daun cengkeh terhadap bakteri *A. actinomycetemcomitans* paling besar dengan konsentrasi 250 <sup>mg</sup>/<sub>ml</sub> yaitu 18,83 mm, terdapat perbedaan bermakna variasi konsentrasi ekstrak etanol daun cengkeh terhadap pertumbuhan bakteri *A. actinomycetemcomitans*.

**Kata kunci :** *A. actinomycetemcomitans*, ekstrak etanol daun cengkeh, dan diameter zona hambat.

THE INFLUENCE OF ETHANOL EXTRACT OF CLOVE LEAF  
(*Syzygium aromaticum*) ON BACTERIA GROWTH *Aggregatibacter*  
*actinomycetemcomitans*

Adisty Maulida Umamity<sup>1</sup>, Ana Hidayati Mukaromah<sup>2</sup>, Sri Sinto Dewi<sup>3</sup>

1. DIV Study Program Health Analyst Faculty of Nursing and Health Sciences University of Muhammadiyah Semarang
2. Chemical Laboratory Faculty of Nursing and Health Sciences Muhammadiyah University Semarang
3. Microbiology Laboratory, Faculty of Nursing and Health, Muhammadiyah University, Semarang

ABSTRACT

Clove leaves are one of the plants that is efficacious as a natural herbal medicine. Clove leaves contain flavoid compounds, tannins, saponins, and eugenols which are antibacterial. The purpose of analyzing the different zones of inhibition of variation of clove leaf ethanol extract. Experimental research with well diffusion method and rejuvenation stage of *A. actinomycetemcomitans* using MHA media. The results of the inhibition zone diameter of clove leaf ethanol extract with concentrations of 100, 150, 200, and 250  $\text{mg/ml}$  obtained results were 16.16 mm, 17.00 mm, 18.16 mm, and 18.83 mm, inhibitory zones, respectively. The ethanol extract of clove leaves against bacteria *A. actinomycetemcomitans* highest with a concentration of 250  $\text{mg/ml}$  is 18.83 mm, there is a significant difference in the concentration variation of clove leaf ethanol extract on the growth of bacteria *A. actinomycetemcomitans*.

**Keywords:** *A. actinomycetemcomitans*, clove leaf ethanol extract, and inhibition zone diameter.