

INTISARI

Buah adas (*Foeniculum vulgare* Mill) bermanfaat untuk mengatasi sakit perut, mual, perut kembung, muntah, diare, dan nyeri haid. Kandungan buah adas (*Foeniculum vulgare* Mill) yang diduga memiliki daya antibakteri, yaitu minyak atsiri, flavonoid, dan kumarin.

Penelitian ini bertujuan untuk mengetahui apakah ekstrak etanolik buah adas mempunyai daya antibakteri terhadap *Escherichia coli* dan *Staphylococcus aureus* dan mengetahui berapa besar kadar hambat minimum (KHM) dan kadar bunuh minimum (KBM) yang dapat menghambat dan membunuh pertumbuhan bakteri *Escherichia coli* dan *Staphylococcus aureus*.

Jenis penelitian ini adalah penelitian eksperimental murni rancangan acak lengkap pola searah. Penentuan daya antibakteri dilakukan dengan metode difusi sumuran. Penentuan kadar hambat minimum (KHM) dan kadar bunuh minimum (KBM) dilakukan dengan metode dilusi padat. Cara analisis statistik menggunakan ANOVA satu arah kemudian dilanjutkan *LSD test* dengan taraf kepercayaan 95 %.

Hasil penelitian yang diperoleh bahwa ekstrak etanolik buah adas (*Foeniculum vulgare* Mill) memiliki daya antibakteri terhadap *Escherichia coli* dan *Staphylococcus aureus*. *Escherichia coli* memiliki KHM sebesar 5,5% dan KBM sebesar 7%, sedangkan pada *Staphylococcus aureus* memiliki KHM sebesar 3% dan KBM sebesar 4%.

Kata kunci : Buah adas (*Foeniculum vulgare* Mill), Kadar Hambat Minimum (KHM) dan Kadar Bunuh Minimum (KBM) , *Escherichia coli* dan *Staphylococcus aureus*.

ABSTRACT

Fennel fruit (*Foeniculum vulgare* Mill) effective to cure stomachache, heaving stomach, vomit, diarrhea and menstruation upset. The constituent of fennel fruit that is suspected having antibacterial activity are volatile oil, flavonoid, and coumarine.

This research aimed to find out whether ethanolic extract of fennel fruit had antibacterial activity against *Escherichia coli* and *Staphylococcus aureus* and what is the minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC).

This research was a pure experimental research with one way model of completely randomized design. The antibacterial activity assay was conducted by diffusion method. The minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) were determined using solid dilution method. The statistical analysis used was one way ANOVA and continued with the LSD test ($p=0,05$).

The result of this research showed that ethanolic extract of fennel fruit (*Foeniculum vulgare* Mill) had antibacterial activity against *Escherichia coli* with MIC and MBC of 5,5 % b/v and 7 % b/v, respectively and against *Staphylococcus aureus* with the MIC and MBC of 3 % b/v and 4 % b/v respectively.

Key words : Fennel fruit (*Foeniculum vulgare* Mill), Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC), *Escherichia coli* and *Staphylococcus aureus*.