

INTISARI

MAULITA, MD., 2020. AKTIVITAS ANTIBAKTERI EKSTRAK, FRAKSI N-HEKSANA, ETIL ASETAT, DAN FRAKSI AIR DARI DAUN JAMBU BIJI (*Psidium guajava* L.) TERHADAP BAKTERI GRAM NEGATIF

Daun jambu biji (*Psidium guajava* L.) mengandung senyawa memiliki aktivitas antibakteri yaitu alkaloid, flavonoid, saponin, terpenoid, dan tanin. Tujuan dari penelitian ini untuk mengetahui aktivitas antibakteri ekstrak, fraksi n-heksana, fraksi etil asetat, dan fraksi air dari daun jambu biji dalam menghambat bakteri Gram negatif yaitu *Escherichia coli* dan *Shigella spp.*

Data dalam penelitian ini menggunakan data riset laboratorium dan riset studi literatur. Data riset laboratorium adalah identifikasi tumbuhan jambu biji, ekstraksi, fraksinasi, dan kandungan senyawa kimia. Data riset studi literatur antara lain: kromatografi lapis tipis dan aktivitas antibakteri daun jambu biji (*Psidium guajava* L.).

Ekstrak, fraksi n-heksana, fraksi etil asetat, dan fraksi air dari daun jambu biji (*Psidium guajava* L.) memiliki aktivitas antibakteri terhadap bakteri Gram negatif yaitu *Escherichia coli* dan *Shigella spp.* Senyawa aktif yang terkandung dalam ekstrak daun jambu biji putih varietas klutuk Jawa (*Psidium guajava* L.) yang memiliki aktivitas antibakteri terhadap bakteri gram negatif *Escherichia coli* dan *Shigella spp* adalah alkaloid, flavonoid, saponin, terpenoid, dan tanin. Dari fraksi n-heksana, etil asetat, dan fraksi air daun jambu biji (*Psidium guajava* L.) yang memiliki zona hambat yang paling baik terhadap bakteri gram negatif *Escherichia coli* dan *Shigella spp* adalah fraksi etil asetat berdasarkan studi literatur.

Kata kunci: Daun jambu biji (*Psidium guajava* L.), Antibakteri, *Escherichia coli*, *Shigella spp.*

ABSTRACT

MAULITA, MD., 2020. ANTIBACTERIAL ACTIVITY EXTRACT, N-HEXANE FRACTION, ETHYL ACETATE, AND WATER FRACTION FROM GUAJAVA LEAVES (*Psidium guajava* L.) AGAINST NEGATIVE GRAM BACTERIES

Guava leaves (*Psidium guajava* L.) contains compounds that have antibacterial activity is alkaloids, flavonoids, saponins, terpenoids, and tannins. The purpose of this study was to determine the antibacterial activity of extracts, n-hexane fraction, ethyl acetate fraction, and water fraction from guava leaves in inhibiting Gram negative bacteria is *Escherichia coli* and *Shigella spp.*

The data in this study used laboratory research data and literature study research. Laboratory research data is the identification of guava plants, extraction, fractionation, and chemical compounds. Research data from literature studies include: thin layer chromatography and the antibacterial activity of guava leaves (*Psidium guajava* L.).

Extract, n-hexane fraction, ethyl acetate fraction, and water fraction from guava leaves (*Psidium guajava* L.) has antibacterial activity against Gram negative bacteria is *Escherichia coli* and *Shigella spp.* The active compound contained in the white guava leaf extract of the Javanese klutuk variety (*Psidium guajava* L.) which has antibacterial activities against gram-negative bacteria *Escherichia coli* and *Shigella spp* are alkaloids, flavonoids, saponins, terpenoids, and tannins. From the fraction of n-hexane, ethyl acetate, and water fraction of guava leaves (*Psidium guajava* L.) which has the best inhibition zone against gram-negative bacteria *Escherichia coli* and *Shigella spp* is the ethyl acetate fraction based on literature studies.

Keywords: Guajava leaves (*Psidium guajava* L.), Antibacterial, *Escherichia coli*, *Shigella spp.*