

ABSTRAK

PENETAPAN KADAR FENOL DAN FLAVONOID DARI EKSTRAK RIMPANG DAN DAUN KUNYIT (*Curcuma longa L.*) SERTA UJI AKTIVITAS ANTIBAKTERI (*Propionibacterium acne*)

Oleh :

Anastasia Noviani Handoko

201FF03063

Kunyit merupakan salah satu jenis tanaman yang dipercaya memiliki manfaat bagi kesehatan. Komponen utama yang berkhasiat dalam Rimpang kunyit adalah kurkuminoid, flavonoid, polifenol, dan minyak atsiri. Komponen utama ini dipercaya memiliki aktivitas antibakteri. Tujuan dari penelitian ini adalah Untuk mengetahui aktivitas antibakteri ekstrak daun dan rimpang kunyit (*Curcuma longa L.*) terhadap pertumbuhan *Propionibacterium acne* dan mengetahui kadar flavonoid dan fenol dalam ekstrak rimpang dan daun kunyit. ekstrak daun dan rimpang kunyit (*Curcuma longa L.*) memiliki aktivitas antibakteri terhadap pertumbuhan *propionibacterium acne* dengan hasil konsentrasi ekstrak yang paling kuat di konsentrasi 25%. Penentuan kadar fenol dan flavonoid dilakukan dengan metode spektrofotometri Uv-vis. Kandungan fenol diuji menggunakan standar asam galat dan kandungan flavonoid diuji menggunakan standar kuersetin. Hasil kadar fenol pada ekstrak rimpang kunyit yaitu n-heksan 12,834 mg GAE/g, etil asetat 15,637 mg GAE/g, etanol 14,825 mg GAE/g, dan Hasil kadar fenol pada ekstrak daun kunyit yaitu n heksan 12,218 mg GAE/g, etil asetat 5,945 mg GAE/g, etanol 12,622 mg GAE/g. Hasil kadar flavonoid pada ekstrak rimpang kunyit yaitu n-heksan 9,622 mg QE/g, etil asetat 10,963 mg QE/g, etanol 13,596 mg QE/g, dan Hasil kadar fenol pada ekstrak daun kunyit yaitu n heksan 7,876 mg QE/g, etil asetat 14,855 mg QE/g, etanol 14,310 mg QE/g.

Kata kunci : kunyit, fenol, flavonoid, Antibakteri, *propionibacterium acne*

ABSTRACT

DETERMINATION OF PHENOL AND FLAVONOID CONTENT FROM TURMERIC (*Curcuma longa* L.) Rhizome and LEAF EXTRACT AND TEST FOR ANTIBACTERIAL ACTIVITY (*Propionibacterium acne*)

By :

Anastasia Noviani Handoko

201FF03063

Turmeric is a type of plant that is believed to have health benefits. The main components that are efficacious in turmeric rhizomes are curcuminoids, flavonoids, polyphenols and essential oils. This main component is believed to have antibacterial activity. The aim of this research was to determine the antibacterial activity of turmeric leaf and rhizome extracts (*Curcuma longa* L.) on the growth of *Propionibacterium acne* and to determine the levels of flavonoids and phenols in turmeric rhizome and leaf extracts. Turmeric leaf and rhizome extract (*Curcuma longa* L.) has antibacterial activity against the growth of *Propionibacterium acne* with the strongest extract concentration at 25%. Determination of phenol and flavonoid levels was carried out using the UV-vis spectrophotometric method. The phenol content was tested using a gallic acid standard and the flavonoid content was tested using a quercetin standard. The results of phenol levels in turmeric rhizome extract are n-hexane 12.834 mg GAE/g, ethyl acetate 15.637 mg GAE/g, ethanol 14.825 mg GAE/g, and the results of phenol levels in turmeric leaf extract are n hexane 12.218 mg GAE/g, ethyl acetate 5.945 mg GAE/g, ethanol 12.622 mg GAE/g. The results of flavonoid levels in turmeric rhizome extract are n-hexane 9.622 mg QE/g, ethyl acetate 10.963 mg QE/g, ethanol 13.596 mg QE/g, and results of phenol levels in turmeric leaf extract are n hexane 7.876 mg QE/g, ethyl acetate 14,855 mg QE/g, ethanol 14,310 mg QE/g.

Keywords: turmeric, phenol, flavonoid, Antibacterial, *propionibacterium acne*