

ABSTRAK

Nama : Rina Aryati
Program Studi : Farmasi S1
Judul : Uji Aktivitas Antibakteri Ekstrak Etanol 96%, Fraksi N-heksana dan Etil Asetat Akar Berebat (*Spatholobus ferrugineus* (Zoll. & Moritzi) Benth.) Terhadap Bakteri *Streptococcus sanguinis*

Akar berebat (*Spatholobus ferrugineus* (Zoll. & Moritzi) Benth.) merupakan tanaman yang banyak tumbuh di Kabupaten Belitung Timur dimanfaatkan sebagai obat sariawan yang memiliki senyawa aktif seperti flavonoid, alkaloid, tanin, saponin, dan triterpenoid, sehingga memiliki aktivitas antimikroba. Tujuan penelitian dilakukan untuk mengetahui aktivitas antibakteri ekstrak etanol 96%, fraksi *n*-heksana, dan etil asetat. Akar berebat terhadap bakteri *Streptococcus sanguinis*. Bahan uji adalah batang akar berebat dengan metode ekstraksi digunakan secara maserasi dengan menggunakan pelarut etanol 96% kemudian difraksinasi dengan pelarut *n*-heksana dan pelarut etil asetat. Uji aktivitas antibakteri dilakukan dengan menggunakan metode difusi cakram pada konsentrasi 5%, 15%, 25%, 35%, 45%, dengan kontrol positif *Chlorhexidine gluconate* 0,02% dan kontrol negatif DMSO 10%. Hasil penelitian menunjukkan bahwa ekstrak etanol 96% batang akar berebat memiliki aktivitas antibakteri terhadap Bakteri *Streptococcus sanguinis* pada Diameter Daya Hambat (DDH) berturut-turut 5% ($9,32 \pm 0,63$ mm), 15% ($11,15 \pm 0,90$ mm), 25% ($11,53 \pm 0,92$ mm), 35% ($13,95 \pm 0,44$ mm), 45% ($14,35 \pm 0,38$ mm), kontrol (+) $16,01 \pm 1,65$ mm dan kontrol (-) 0 mm. DDH fraksinasi *n*-heksana 5% ($7,87 \pm 0,54$ mm), 15% ($8,57 \pm 0,71$ mm), 25% ($8,76 \pm 0,53$ mm), 35% ($9,04 \pm 0,14$ mm), 45% ($9,21 \pm 0,36$ mm), kontrol (+) ($16,47 \pm 1,07$ mm) dan kontrol (-) 0 mm. DDH fraksinasi etil asetat 5% ($10,63 \pm 0,99$ mm), 15% ($13,77 \pm 2,13$ mm), 25% ($14,29 \pm 1,45$ mm), 35% ($15,83 \pm 1,69$ mm), 45% ($16,53 \pm 2,18$ mm), kontrol (+) ($16,64 \pm 0,31$ mm) dan kontrol (-) 0 mm.

Kata kunci : Antibakteri, *Spatholobus ferrugineus* (Zoll. & Moritzi) Benth., *Streptococcus sanguinis*

ABSTRACT

Name : Rina Aryati

Study Program : Pharmacy

Title : Antibacterial Activity Uji The study focuses on the effects of ethanol (96%), heksane fraction, and ether as a berebat (*Spatholobus ferrugineus* (Zoll. & Moritzi) Benth.) on bacteria *Streptococcus sanguinis*.

The berebat (*Spatholobus ferrugineus* (Zoll. & Moritzi) Benth.) is a common plant in the Central Highlands used as a saline remedy. It contains active ingredients such as flavonoids, alkaloids, tannin, saponin, and triterpenoids, which give it antimicrobial properties. The purpose of the study is to understand the antibacterial activity of ethanol 96%, n-hexane fraction, and ethyl acetate. The bark is resistant to *Streptococcus sanguinis* bacteria. The raw material is berebat stem bark, and the extraction method is used in a macerated fashion using 96% ethanol as the primary extract, followed by n-hexane and acetate extract. Antibacterial test is carried out using the disk diffusion method at concentrations of 5%, 15%, 25%, 35%, and 45%, with positive control of 0.02% chlorhexidine gluconate and negative control of 10% DMSO. The study's findings indicate that 96% of the extracted ethanol from berebat stem has antibacterial activity against *Streptococcus sanguinis* bacteria on the Diameter Daya Hambat (DDH) is 5% (9,32±0,63 mm), 15% (11,15±0,90 mm), 25% (11,53±0,92 mm), 35% (13,95±0,44 mm), 45% (14,35±0,38 mm), control (+) 16,01±1,65 mm, and control (-) 0 mm. 5% (7,87±0,54 mm), 15% (8,57±0,71 mm), 25% (8,76±0,53 mm), 35% (9,04±0,14 mm), 45% (9,21±0,36 mm), control (+) (16,47±1,07 mm) and control (-) 0 mm are the DDH fraction values. 5% (10,63±0,99 mm), 15% (13,77± 2,13 mm), 25% (14,29± 1,45 mm), 35% (15,83±1,69 mm), 45% (16,53± 2,18 mm), control (+) (16,64±0,31 mm) and control (-) 0 mm are the values of DDH fraction.

Keywords : Antibacterial, *Streptococcus sanguinis*; *Spatholobus ferrugineus* (Zoll. & Moritzi); Benth.