

ABSTRAK

UJI AKTIVITAS ANTIBAKTERI EKSTRAK DAUN DADAP SEREP (*Erythrina variegata* L.) TERHADAP BAKTERI *Shigella dysenteriae*

Norhalisa

Rizka Ayu Wahyuni, Nurbidayah

Daun dadap serep (*Erythrina variegata* L.) adalah salah satu tanaman yang digunakan masyarakat sebagai obat tradisional. Daun dadap serep (*Erythrina variegata* L.) biasa digunakan oleh masyarakat sebagai obat diare, demam, pelancar ASI, antimalaria dan lain-lain. Penyakit yang disebabkan oleh bakteri *Shigella dysenteriae* seperti diare mampu diobati menggunakan antibiotik. Akan tetapi, dalam beberapa tahun terakhir resistensi antibiotik terhadap beberapa bakteri patogen banyak dijumpai. Penelitian ini bertujuan untuk mengetahui kandungan senyawa metabolit sekunder yang terkandung dalam ekstrak daun dadap serep (*Erythrina variegata* L.) melalui skrining fitokimia dan mengetahui aktivitas antibakteri ekstrak daun dadap serep (*Erythrina variegata* L.) terhadap bakteri *S.dysenteriae*. Ekstrak daun dadap serep (*Erythrina variegata* L.) dilakukan dengan ekstraksi metode maserasi menggunakan pelarut etanol 96%. Uji aktivitas antibakteri ekstrak daun dadap serep (*Erythrina variegata* L.) terhadap bakteri *S.dysenteriae* dilakukan menggunakan variasi konsentrasi 25%, 50%, 75% dan 100% dengan metode difusi difusi Kirby-bauer. Berdasarkan hasil skrining fitokimia, ekstrak daun dadap serep (*Erythrina variegata* L.) menunjukkan positif mengandung senyawa alkaloid, flavonoid, saponin dan tanin. Hasil diameter zona hambat ekstrak daun dadap serep (*Erythrina variegata* L.) terhadap bakteri *S.dysenteriae* dengan konsentrasi 25%, 50%, 75% dan 100% menunjukkan daya hambat dengan kategori lemah. Diameter zona hambat terbesar ditunjukkan pada konsentrasi 50% yaitu 6,00 mm. Kemudian, hasil diameter zona hambat pada kontrol positif Ciprofloxacin menunjukkan daya hambat dengan kategori sangat kuat, sedangkan pada kontrol negatif aquadest tidak terbentuk zona hambat. Berdasarkan hasil penelitian ini dapat disimpulkan bahwa kandungan senyawa yang terkandung dalam ekstrak daun dadap serep (*Erythrina variegata* L.) masih kurang efektif dalam menghambat bakteri *S.dysenteriae*.

Kata kunci : Antibakteri, *Shigella dysenteriae*, daun dadap serep.

ABSTRACT

ANTIBACTERIAL ACTIVITY TEST OF SPARE DADAP LEAF EXTRACT (*Erythrina variegata* L.) AGAINST *Shigella dysenteriae* bacteria

Norhalisa

Rizka Ayu Wahyuni, Nurbidayah

Spare dadap leaves (*Erythrina variegata* L.) are one of the plants used by the community as a traditional medicine. Spare dadap leaves (*Erythrina variegata* L.) are commonly used by the community as a medicine for diarrhea, fever, breast milk booster, antimalarial, and others. Diseases caused by *Shigella dysenteriae* bacteria such as diarrhea can be treated with antibiotics. However, in recent years, antibiotic resistance to some pathogenic bacteria has been common. This study aims to determine the content of secondary metabolite compounds contained in the extract of spare dadap leaves (*Erythrina variegata* L.) through phytochemical screening and to determine the antibacterial activity of spare dadap leaf extract (*Erythrina variegata* L.) against *S. dysenteriae* bacteria. Extraction of spare dadap leaves (*Erythrina variegata* L.) was carried out by extraction by maceration method using 96% ethanol solvent. Antibacterial activity test of spare dadap leaf extract (*Erythrina variegata* L.) against *S. dysenteriae* bacteria was carried out using concentration variations of 25%, 50%, 75%, and 100% by the Kirby-Bauer diffusion method. Based on the results of phytochemical screening, the leaf extract of the spare dadap sleep (*Erythrina variegata* L.) indicates that it contains alkaloid compounds, flavonoids, saponins, and tannins. Results of the diameter of the inhibition zone of spare dadap leaf extract (*Erythrina variegata* L.) against bacteria with concentrations of 25%, 50%, 75%, and 100% showed inhibitory power with weak categories. The diameter of the largest inhibition zone is indicated at a concentration of 50% which is 6.00 mm. Then, the results of the diameter of the inhibitory zone in the positive control of Ciprofloxacin showed that the inhibitory force was of a very strong category, while in the negative control of aquadest, no inhibitory zone was formed. Based on the results of this study, it can be concluded that the content of compounds contained in the extract of the leaves of the spare dadap (*Erythrina variegata* L.) is still less effective in inhibiting *S. dysenteriae* bacteria.

Keywords: Antibacterial, *Shigella dysenteriae*, spare dadap leaf.