

ABSTRAK

Nama : Ella Junita Dewi
Program Studi : Farmasi
Judul Skripsi : Formulasi Gel Ekstrak Etanol Daun Bayam Merah (*Amaranthus tricolor* L.) Dan Uji Antibakteri Terhadap *Staphylococcus aureus*

Penelitian ini bertujuan untuk memformulasikan gel ekstrak etanol daun bayam merah (*Amaranthus tricolor* L.) dan menguji aktivitas antibakterinya terhadap *Staphylococcus aureus*. Daun bayam merah diekstraksi dengan metode maserasi menggunakan pelarut etanol 96%. Hasil skrining fitokimia menunjukkan bahwa ekstrak daun bayam merah positif mengandung flavonoid, tanin, dan saponin. Hasil uji DDH ekstrak kental daun bayam merah menghasilkan zona hambat dengan kategori sedang (5%; 7,92 dan 10%;9,74) dan kuat (15%;10,94). Gel yang di formulasikan memenuhi persyaratan mutu gel secara organoleptis, homogenitas, pH, viskositas, daya sebar, dan daya lekat serta stabil menurut SNI. Uji aktivitas antibakteri gel ekstrak daun bayam merah menunjukkan zona hambat kategori yang kuat pada semua konsentrasi (5%; 12,55, 10%; 13,82, dan 15%; 14,50) terhadap *Staphylococcus aureus*.

Kata kunci: *Amaranthus tricolor* L., antibakteri, formula, gel, *Staphylococcus aureus*.

ABSTRACT

Nama : Ella Junita Dewi
Program Studi : Farmasi
Judul Skripsi : *Formulation Gel of Extract Ethanol Red Spinach Leaves (Amaranthus tricolor L.) and Antibacterial Test Against Staphylococcus aureus*

This study aims to formulate ethanol extract gel from red amaranth leaves (Amaranthus tricolor L.) and test its antibacterial activity against Staphylococcus aureus. Red amaranth leaves were extracted using the maceration method with 96% ethanol solvent. Phytochemical screening results showed that red amaranth leaf extract positively contained flavonoids, tannins, and saponins. The DDH test of the concentrated red amaranth leaf extract produced inhibition zones categorized as moderate (5%; 7.92 and 10%; 9.74) and strong (15%; 10.94). The formulated gel meets the quality requirements for gel in terms of organoleptic properties, homogeneity, pH, viscosity, spreadability, and adhesion, as well as stability according to SNI standards. The antibacterial activity test of the red spinach leaf extract gel showed a strong inhibition zone at all concentrations (5%; 12.55, 10%; 13.82, and 15%; 14.50) against Staphylococcus aureus.

Keywords: *Amaranthus tricolor L., antibacterial, formula, gel, Staphylococcus aureus.*