INTISARI

RAHMIATI, N., 2022, FORMULASI DAN UJI AKTIVITAS ANTIBAKTERI *Staphylococcus aureus* SEDIAAN FORMULASI *HAND SANITIZER SPRAY* EKSTRAK BATANG BAJAKAH TAMPALA (*Spatholobus littoralis* Hassk) VARIASI KONSENTRASI GLISERIN SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI SURAKARTA.

Staphylococcus aureus merupakan bakteri patogen yang berada dikulit menyebabkan beragam penyakit seperti infeksi kulit, keracunan makanan dan bakteremia. Bajakah tampala diketahui mengandung senyawa flavonoid, saponin, fenolik dan tanin sebagai aktivitas antibakteri. Tujuan penelitian untuk memformulasikan sediaan *hand sanitizer spray* ekstrak bajakah tampala untuk menguji sifat fisik, stabilitas, dan aktivitas antibakteri terhadap bakteri *S. aureus.*

Bajakah tampala diekstraksi dengan metode maserasi selama 5 hari dengan pelarut etanol 70% lalu kemudian dilakukan identifikasi senyawa. Ekstrak bajakah tampala diformulasi 12,5% menjadi tiga formula dengan variasi konsentrasi gliserin yaitu 5%, 7,5%, dan 10%, kemudian diuji mutu fisik meliputi organoletik, pH, viskositas, pola penyemprotan dan satbilitas serta aktivitasnya terhadap bakteri *S. aureus.* Data dianalisa secara statistik dengan uji *Shapiro-wilk* dilanjutkan dengan uji one *way anova.*

Hasil penelitian menyatakan bahwa ekstrak bajakah tampala mengandung flavonoid, saponin dan tanin. Sediaan *hand sanitizer* spray ekstrak batang bajakah tampala variasi konsentrasi gliserin berpengaruh terhadap mutu fisik, stabilitas dan aktivitas antibakterinya terhadap *S. aureus* serta formula yang paling baik ialah formula ketiga dengan variasi konsentrasi gliserin 10% dengan rata-rata diameter hambat 13,17mm, hasil uji statistik terhadap aktivitas antibakteri antar formula memiliki aktivitas antibakteri yang berbeda secara signifikan.

Kata Kunci : Antibakteri, bajakah tampala, *hand sanitizer*, *Staphylococcus aureus, spray,* gliserin

ABSTRACT

RAHMIATI, N., 2022, FORMULATION AND ANTI-BACTERIAL ACTIVITY OF *Staphylococcus aureus* FORMULATION OF HAND SANITIZER SPRAY EXTRACT OF BAJAKAH TAMPALA (*Spatholobus littoralis* Hassk) EXTRACT WITH VARIATIONS OF GLYCERINE CONCENTRATION, THESIS, FACULTY OF PHARMACY, UNIVERSITY OF SETIA BUDI, SURAKARTA.

Staphylococcus aureus is a pathogenic bacterium that lives on the skin, causing various diseases such as skin infections, food poisoning, and bacteremia. Bajakah tampala is known to contain flavonoids, saponin, phenolic, and tannin compounds with antibacterial activity. The research objective was to formulate a *hand sanitizer spray* of bajakah tampala extract to test the physical properties, stability, and antibacterial activity against *S. aureus* bacteria.

Bajakah tampala steel was extracted by the maceration method for 5 days with 70% ethanol solvent, and then identification of the compound was carried out. Bajakah tampala extract was formulated at 12.5% into 3 formulas with varying concentrations of glycerin, namely 5%, 7.5%, and 10%, and then tested for stability, physical quality including pH, viscosity, spraying pattern, and activity against *S. aureus* bacteria. The Shapiro-Wilk test was used to analyze the data, followed by the one-way ANOVA test.

The results showed that the extract of bajakah tampala contained flavonoids, saponins and tannins. The preparation of hand sanitizer spray for bajakah extract without variations in glycerin concentration affected the stability, physical quality and antibacterial activity against *S. aureus*, and the best formula was the third formula with a variation of 10% glycerin concentration with an average inhibition diameter of 13.17 mm. The results of statistical tests on the antibacterial activity of the three formulas showed significantly different antibacterial activities.

Kata kunci : Antibacterial, bajakah tampala, *hand sanitizer*, *Staphylococcus aureus*, glycerin