

INTISARI

AL-MUBARAK, AGUSTIQORI, 2020, UJI MUTU FISIK SEDIAAN GEL EKSTRAK DAUN BELIMBING WULUH (*Averrhoa blimbi* L.) SERTA STUDI LITERATURE AKTIVITASNYA TERHADAP *Staphylococcus aureus* ATCC 25923 SECARA DIFUSI

Penyakit kulit yang disebabkan oleh bakteri cukup banyak terjadi karena bakteri mudah tumbuh dan berkembang biak di kulit, bila kebersihan kurang di perhatikan. Beberapa macam jenis bakteri yang dapat menginfeksi salah satunya adalah bakteri *Staphylococcus aureus* yang dapat menempel pada kulit. Penelitian ini bertujuan untuk mengetahui mutu fisik sediaan gel serta aktivitas antibakteri gel ekstrak daun belimbing wuluh yang berkhasiat sebagai antibakteri terhadap *Staphylococcus aureus* secara in vitro berdasarkan studi literature.

Ekstrak daun belimbing wuluh diekstraksi dengan cara maserasi menggunakan alkohol 70%. Ekstrak etanol daun belimbing wuluh dibuat dalam formula gel dengan konsentrasi 5%, 10%, dan 15%. Pengujian mutu fisik gel meliputi uji organoleptik, homogenitas, pH, viskositas, daya lekat, daya sebar dan stabilitas. Data mutu fisik dianalisis menggunakan ANOVA two way dengan nilai signifikansi $< 0,05$. Metode pengujian daya hambat menggunakan metode difusi cakram dengan bakteri *Staphylococcus aureus* secara studi literature.

Hasil pengujian mutu fisik menunjukkan keempat formula memiliki mutu fisik dan stabilitas yang baik karena formula sudah memenuhi standar parameter mutu fisik. Pada hasil studi literature dengan secara online menggunakan kata kunci “Uji aktivitas antibakteri daun belimbing wuluh terhadap bakteri *Staphylococcus aureus* secara in vitro”, berupa jurnal nasional non-akreditasi maupun hasil skripsi penelitian. Hasil yang didapatkan pada beberapa jurnal dapat diketahui bahwa ekstrak daun belimbing wuluh serta beberapa sediaan daun belimbing wuluh memiliki aktivitas antibakteri terhadap bakteri *Staphylococcus aureus* secara in vitro

Kata kunci : Daun belimbing wuluh (*Averrhoa blimbi* L.), antibakteri, mutu fisik

ABSTRACT

AL-MUBARAK, AGUSTIQORI, 2020, PHYSICAL QUALITY EXAMINATION OF ATTR 25923 STRUCTURAL LEAF EXTRACT GEL EXTRACT (*Averrhoa blimbi* L.) AND LITERATURE STUDY OF ACTIVITIES ON DIFFUSION *Staphylococcus aureus*.

Skin diseases caused by bacteria occur quite a lot because bacteria easily grow and multiply in the skin, if hygiene is not noticed. Some types of bacteria that can infect one of them is *Staphylococcus aureus* which can stick to the skin. This study aims to determine the physical quality of gel preparations as well as the antibacterial activity of starfruit leaf extract gel which is efficacious as an antibacterial against *Staphylococcus aureus* in vitro based on literature studies.

Starfruit leaf extract extracted by maceration using 70% alcohol. Ethanol extract of starfruit leaves is made in a gel formula with a concentration of 5%, 10%, and 15%. Testing the physical quality of the gel includes organoleptic tests, homogeneity, pH, viscosity, adhesion, dispersion and stability. Physical quality data were analyzed using *two-way* ANOVA with significance values <0.05 . Inhibition testing method uses the disc diffusion method with *Staphylococcus aureus* bacteria in literature studies.

The results of the physical quality test showed that the four formulas had good physical quality and stability because the formulas had met the standard of physical quality parameters. In the literature study results online using the keyword "Test the antibacterial activity of wuluh starfruit leaf against *Staphylococcus aureus* bacteria in vitro", in the form of non-accreditation national journals and research thesis results. The results obtained in several journals can be known that the extract of starfruit leaves has antibacterial activity against *Staphylococcus aureus* bacteria in vitro.

Keywords : Wuluh starfruit leaves (*Averrhoa blimbi* L.), antibacterial, physical quality