

## INTISARI

**SYAIBAN, 2017, FORMULASI SEDIAAN GEL *HAND SANITIZER* EKSTRAK DAUN UNGU (*Graphthophyllum pictum* (L.) Griff) DENGAN VARIASI BASIS CARBOPOL 940 DAN CMC-Na SERTA UJI AKTIVITAS ANTIBAKTERI TERHADAP *Staphylococcus aureus* ATCC 25923, SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA.**

Daun ungu mempunyai khasiat sebagai obat sembelit, peluruh kemih, peluruh haid, obat bisul, dan wasir. Daun ungu (*Graphthophyllum pictum* (L.) Griff) memiliki kandungan flavonoid, saponin, tanin, alkaloid, steroid. Ekstrak daun ungu diketahui memiliki aktivitas antibakteri *Staphylococcus aureus*. Tujuan penelitian ini untuk mengetahui pengaruh variasi konsentrasi *gelling agent* Carbopol 940 dan CMC-Na dalam pembuatan sediaan gel *hand sanitizer* ekstrak daun ungu serta uji aktivitasnya terhadap *Staphylococcus aureus* ATCC 25923.

Daun ungu diserbuk dan diekstraksi dengan metode maserasi dengan etanol 96%. Kemudian ekstrak daun ungu dibuat sediaan gel menggunakan 5 formula yaitu formula I, formula II, formula III, formula IV, dan formula V dengan konsentrasi carbopol 940 dan CMC-Na masing-masing berturut-turut 1:0; 0,75:0,25; 0,5:0,5; 0,25:0,75; dan 0:1. Sediaan gel *hand sanitizer* ekstrak daun ungu diuji sifat fisik dan stabilitas gel selama 21 hari serta diuji aktivitas antibakterinya dengan metode difusi. Data yang diperoleh dianalisis menggunakan *One Sampel Kolmogorov Smirnov* dan *One Way Anova* pada program SPSS.

Hasil uji stabilitas gel yang diperoleh dari formula I - V menghasilkan sediaan gel dari ekstrak daun ungu yang stabil selama penyimpanan 21 hari dan memiliki aktivitas antibakteri. Sediaan gel formula IV memiliki sifat fisik dan stabilitas paling baik selama penyimpanan 21 hari serta zona hambat antibakteri *Staphylococcus aureus* ATCC 25923 sebesar 9,67 mm.

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**Kata kunci** : Daun ungu (*Graphthophyllum pictum* (L.) Griff), gel, carbopol 940, CMC-Na, stabilitas, antibakteri, *Staphylococcus aureus*.

## ABSTRACT

**SYAIBAN, 2017, FORMULATION OF GEL *HAND SANITIZER* EXTRACT PURPLE LEAF (*Graphthophyllum pictum* (L.) Griff) WITH VARIATIONS OF CARBOPOL 940 AND CMC-Na BASIS AND ANTIBACTERY ACTIVITY TEST ON *Staphylococcus aureus* ATCC 25923, SKRIPSI, FACULTY OF PHARMACY, SETIA BUDI UNIVERSITY, SURAKARTA.**

Purple leaves have properties as constipation drugs, urinary drugs, menstruation drugs, drugs ulcers, and hemorrhoids. The purple leaves (*Graphthophyllum pictum* (L.) Griff) contain flavonoids, saponins, tannins, alkaloids, steroids. Purple leaf extract is known to have antibacterial activity against *Staphylococcus aureus*. The purpose of this study was to determine the effect of gelling agent concentration variation of Carbopol 940 and CMC-Na in the preparation of gel preparation of purple leaf soil sanitizer and activity test on ATCC *Staphylococcus aureus* 25923.

Purple leaf were extracted with a maceration method with 96% ethanol. Then purple leaf extract was prepared gel preparation using formula 5, formula I, formula II, formula III, formula IV, and formula V with concentration of carbopol 940 and CMC-Na respectively 1: 0; 0.75: 0.25; 0.5: 0.5; 0.25: 0.75; And 0: 1. Gel preparation of hand sanitizer purple leaf extract tested the physical properties and stability of gel for 21 days and tested its antibacterial activity by diffusion method. The data obtained were analyzed using One Sampel Kolmogorov Smirnov and One Way Anova on SPSS program.

The gel stability test results obtained from I - V formula yielded gel preparation from purple leaf extract which was stable for 21 days storage and had antibacterial activity. The gel preparation of the IV formula had the best physical and stability properties for 21 days of storage as well as the 9.67 mm antibacterial inhibitory zone of *Staphylococcus aureus*.

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**Keywords :** Purple leaves (*Graphthophyllum pictum* (L.) Griff), gel, carbopol 940, CMC-Na, stability, antibactery, *Staphylococcus aureus*.