INTISARI

Ekstrak etanolik daun kemangi (*Ocimum basilicum* L. forma *citratum* Back.) mempunyai aktivitas antibakteri terhadap *Staphylococcus aureus.* Sediaan gel dapat meningkatkan efektivitas dan kenyamanan dalam penggunaannya secara topikal. Sifat fisik gel yang baik tergantung dari penggunaan *gelling agent*. HPMC merupakan salah satu *gelling agent*. Tujuan penelitian ini untuk mengetahui pengaruh variasi kadar *gelling agent* HPMC terhadap sifat fisik dan aktivitas antibakteri sediaan gel ekstrak etanolik daun kemangi.

Metode maserasi digunakan untuk mendapatkan ekstrak dengan penyari etanol 95%. Gel diformulasikan menjadi tiga formula dengan variasi kadar HPMC 10%, 15%, dan 20% menggunakan kadar ekstrak sebesar 9,1% untuk setiap formula. Uji sifat fisik meliputi organoleptis, homogenitas, pH, daya sebar, daya lekat, dan viskositas. Pengujian aktivitas antibakteri digunakan metode difusi padat, kemudian diamati diameter zona hambat antibakteri gel. Hasil dianalisis dengan analisis korelasi-regresi, analisis deskriptif secara visual untuk sifat fisik gel, dan analisis *one-way* ANOVA untuk aktivitas antibakteri dengan taraf kepercayaan 95%.

Hasil penelitian menunjukkan peningkatan kadar HPMC menyebabkan gel semakin gelap, wujud semakin kental, peningkatan viskositas, daya lekat, dan penurunan daya sebar, namun tidak mempengaruhi homogenitas, dan pH gel. Pengujian antibakteri menunjukkan peningkatan kadar HPMC menghasilkan perbedaan kemampuan pelepasan zat aktif dalam penurunan daya hambat bakteri sebesar 0,726 cm, 0,674 cm, dan 0,488 cm.

Kata kunci: Gel, Daun Kemangi, HPMC

ABSTRACT

Ethanolic extract of basil leaves (*Ocimum basilicum* L. forma *citratum* back) has an antibacterial activity against *Stapylococcus aureus*. Preparation of gel can increase the effectiveness and convenience in use topically. Good physical properties of the gel depends on the use of gelling agent. HPMC is the one of gelling agent. The purpose of this study was to determine the effect of variations in levels of gelling agent HPMC in the physical properties and antibacterial activity preparation gel ethanolic extract of basil leaves.

Maceration method used to obtain the extract with 95% ethanol. Gel is formulated to three formula with various levels of HPMC 10%, 15%, and 20% use the extract concentration of 9,1% for every formula. The test of physical properties includes organoleptic, homogeneity, pH, dispersive ability, adhesion, and viscosity. Antibacterial activity test used the solid diffusion method and then obeserved the diameter of inhibition zone antibacterial gel. The result was analyzed with regression correlation, visual descriptive for physical properties tests, and analysis one way ANOVA for antibacterial activity with the level of confidence 95%.

The results showed that the increasing levels of HPMC makes the gel getting darker, the more condensed form, an increase of viscosity, adhesion, and decrease of dispersive ability but there is no effect in homogeneity and pH gel. Antibacterial test showed that the increasing levels of HPMC cause differences ability to release the active substance in the decreasing of bacteria inhibition at 0,726 cm, 0,674 cm, and 0,488 cm.

Keyword: Gel, Basil leaves, HPMC.