

ABSTRAC

Noni (*Morinda citrifolia* L.) is a plant that contains various chemical compounds including flavanoids, saponins, tannins, Polyphenols and terpenoids as anti-bacterial. The research aimed to determine whether the ethanol extract of noni leaves (*Morinda citrifolia* L.) could be formulated into an antibacterial gel dosage form and to measure the effectiveness and test the inhibition zone of gel made from *Morinda citrifolia* L. leaves against *Staphylococcus epidermidis* bacteria. The concentration variations from 10 mg/ml to 30 mg/ml. This research was conducted experimentally by evaluating gel preparations and testing antibacterial activity at concentration of 10, 15, 20, 25, and 30 mg/ml, positive control and negative control. The results of research evaluating gel preparations at concentration of 10 mg/ml, 15 mg/ml, 20 mg/ml, 25 mg/ml, 30 mg/ml meet the requirements for gel preparations as well as testing antibacterial activity, namely *Staphylococcus epidermidis* at a concentration of 10 mg/ml for the zone of inhibition. 8 mm (weak), 15 mg/ml zone of inhibition 10,9 mm (moderate), 20 mg/ml zone of inhibition 16,75 (strong), 25 mg/ml zone of inhibition 12,1 mm (moderate), and 30 mg/ml zone of inhibition 13,4 mm (medium). Conclusion : the highest diameter of the inhibition zone for *Staphylococcus epidermidis* bacteria is found at a concentration of 20 mg/ml.

Keywords : Noni Leaf (*Morinda citrifolia* L.); *Staphylococcus epidermidis* Bacteria...

ABSTRAK

Mengkudu (*Morinda citrifolia* L.) adalah tumbuhan yang mempunyai kandungan berbagai senyawa kimia antara lain flavanoid, saponin, tanin, polifenol dan terpenoid sebagai anti bakteri. Tujuan penelitian dilakukan adalah untuk mengetahui apakah ekstrak etanol daun mengkudu (*Morinda citrifolia* L.) dapat diformulasikan menjadi bentuk sediaan gel antibakteri dan untuk mengukur efektivitas dan menguji zona inhibisi gel yang digunakan berkisar antara 10 mg/ml hingga 30 mg/ml. Penelitian ini dilakukan secara eksperimental dengan evaluasi sediaan gel serta melakukan uji aktivitas antibakteri terhadap konsentrasi 10, 15, 20, 25, 30 mg/ml, kontrol positif, dan kontrol negatif. Hasil penelitian evaluasi sediaan gel pada konsentrasi 10 mg/ml, 15 mg/ml, 20 mg/ml, 25 mg/ml, 30 mg/ml memenuhi syarat sediaan gel serta pengujian aktivitas antibakteri yaitu *Staphylococcus epidermidis* pada konsentrasi 10 mg/ml zona hambatnya 8 mm (Lemah), 15 mg/ml zona hambat 10,9 mm (Sedang), 20 mg/ml zona hambat 16,75 mm (Kuat), 25 mg/ml zona hambat 12,1 mm (Sedang) dan 30 mg/ml zona hambat 13,4 mm (Sedang). Kesimpulan : diameter zona hambat paling tinggi terhadap bakteri *Staphylococcus epidermidis* terdapat di konsentrasi 20 mg/ml

Kata kunci: Daun Mengkudu (*Morinda citrifolia*); Bakteri *Staphylococcus epidermidis*