**AKTIVITAS ANTIBAKTERI EKSTRAK DAUN PINANG (*Areca***

***catechu* L.) TERHADAP BAKTERI *Staphylococcus aureu***

**DAN *Escherichia coli***

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**ABSTRAK**

Biji pinang mengandung senyawa alkaloid, flavonoid, tanin, saponin, dan polifenol yang diketahui berkhasiat sebagai antibakteri. Beberapa penelitian menunjukkan ekstrak etanol biji pinang dapat menghambat bakteri seperti Staphylococcus aureus, Escherchia coli, Pseudomonas aeruginosae, dan Candida albicans. Analisis pinang di Filipina menyatakan bahwa buah pinang mengandung senyawa bioaktif yaitu flavonoid di antaranya tanin, yang dapat menguatkan gigi. Diduga tanaman pinang mengandung sejumlah komponen utama senyawa berbasis selenium (Se) sebagai antibakteri.

Tujuan penelitian ini untuk mengetahui adanya aktivitas antibakteri ekstrak etanol daun pinang terhadap bakteri *Staphylococcus aureus* dan *Esceherichia coli.* Mengetahui golongan senyawa metabolit sekunder yang terkandung dalam daun pinang. Ekstrak didapat dengan cara maserasi mengunakan pelarut etanol 96%. Uji aktivitas antibakteri Mengunakan Metode difusi cakram untuk menentukan aktivitas antibakteri.

Hasil skrining fitokimia bahwa serbuk simplisia daun pinang mengandung golongan senyawa alkaloid, flavonoid, triterpenoid/steroid, saponin, tannin dan glokosida. Hasil pengujian aktivas antibakteri pada kosenterasi 5% 10% 20% dapat mengambat pertumbuhan bakteri *Staphylococcus aureus*dan *Esceherichia coli* dengan rata-rata zona hambat masing-masing yaitu zona hambat terhadap bakakteri *Staphylococcus aureus*sebesar 11,16 mm, 13,9 mm, 14,9 mm sedangkan bakteri *Esceherichia coli* sebesar 12,4 mm, 14,03 mm, 17,3 mm. Ekstrak etanol daun pinang dapat mengambat pertumbuhan bakteri *Staphylococcus aureus*dan *Esceherichia coli* memiliki aktivitas daya hambat yang sangat kuat.

**Kata Kunci :** Ekstrak Daun Pinang *Areca catechu* L.Aktivitas Antibakteri, *Staphylococcus aureus* dan *Esceherichia coli.*

***ANTIBACTERIAL ACTIVITY OF BECA LEAF EXTRACT (Areca catechu L.) AGAINST Staphylococcus aureus AND Escherichia coli***

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# ***ABSTRACT***

Areca nut contains aklaloids, flavonoids, tannins, saponins, and polyphenols which are known to have antibacterial properties. Severl studieshave shown that the ethanol extract of areca nut can inhibit bacteria such as *Staphylococcus aureus*, *Escherchia coli*, *Pseudomonas aeruginosae*, *Candidaalbicans*. Analysis of betel nut in the philippines states that areca nut contains bioactive compounds, namely flavonoids including tannins, which can strengthen teeth. It is suspected that betel nut contains a number of main components of selenium (Se) based compounds as antibacterial.

The purpose of this study was to determine the antibacterial activity of areca leaf ethanol extract against *Staphylococcus aureus* and *Esceherichia coli* bacteria. Knowing the class of secondary metabolites contained in areca nut leaves. The extract was obtained by maceration using 96% ethanol as solvent. Antibacterial activity test using the disc diffusion method to determine the antibacterial activity.

The results of phytochemical screening showed that areca nut leaf simplicia powder contains a class of alkaloid compounds, flavonoids, triterpenoids/steroids, saponins, tannins and glucosides. The results of the antibacterial activity test at a concentration of 5% 10% 20% can inhibit the growth of *Staphylococcus aureus* and *Esceherichia coli* bacteria whith an average inhibition zone of 11.16 mm, 13.9 mm, 14, respectively. 9 mm while the *Esceherichia coli* bacteria were 12,4 mm. 14.03 mm, 17.3 mm. The ethanol extract of areca nut leaves can inhibit the growth of *Staphylococcus aureus* and *Esceherichia coli* bacteria and has a very strong inhibitory activity.

**Keywords:** Areca Leaf extract *Areca catechu* L. antibacterial activity *Staphylococcus aureus*and *Esceherichia coli*