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Kajian Potensi Varietas Ekstrak Kulit Buah Pisang (*Musa sp*) Dengan Berbagai Pelarut Sebagai Antibakteri Terhadap *Staphylococcus aureus* Dan *Eschericia coli*

ABSTRAK

Latar belakang : Kulit pisang seringkali dibuang dan hanya menjadi limbah. Apabila dimanfaatkan secara optimal dapat menjadi salah satu alternatif antibakteri. Kandungan metabolit sekunder tannin, fenol, flavonoid, saponin, triterpenoid, alkaloid, steroid yang terkandung pada kulit buah pisang (*Musa sp*) memiliki aktivitas antibakteri yang dapat menghambat pertumbuhan bakteri *Staphylococcus aureus* dan *Eschericia coli*.
Tujuan : Menganalisis pengaruh berbagai pelarut untuk ekstraksi kandungan metabolit sekunder, serta potensi antibakteri ekstrak kulit buah pisang (*Musa sp*).
Metode : Penelitian ini merupakan jenis penelitian non-eksperimental dengan metode literature *review* menggunakan 5 (lima) jurnal yang terdiri atas 1 (satu) jurnal internasional dan 4 (empat) jurnal nasional terakreditasi SCOPUS dan SINTA.
Hasil penelitian : Ekstrak kulit pisang mas, pisang kepok dan pisang kepok kuning mengandung metabolit sekunder yakni fenol, flavonoid, alkaloid, tannin, steroid dan triterpenoid yang memiliki aktivitas antibakteri terhadap bakteri *Staphylococcus aureus* dan *Eschericia coli*. Metabolit sekunder tersebut diekstrak dengan metode maserasi menggunakan pelarut aseton, etanol, metanol dan air, dimana masing-masing varietas dan pelarut memberikan daya hambat yang berbeda.
Kesimpulan : Ekstrak kulit pisang kepok (*Musa paradisiaca* L.) dengan pelarut aseton 80% konsentrasi 0,06% mampu memberikan aktivitas daya hambat bakteri dengan kategori kuat terhadap bakteri *Staphylococcus aureus* (19,57 mm) dan *Eschericia coli* (18,15 mm).

Kata Kunci : Kulit pisang, pelarut, metabolit sekunder, antibakteri

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Study of Potential Varieties of Banana Peel Extract (Musa sp) With Various Solvents As Antibacterial Against *Staphylococcus aureus* and *Eschericia coli*

ABSTRACT

Background : Banana peel waste is often just thrown away, even though if it is used optimally it can be an antibacterial alternative. The content of secondary metabolites of tannins, phenols, flavonoids, saponins, triterpenoids, alkaloids, steroids contained in banana peels (*Musa sp*) has antibacterial activity that can inhibit the growth of *Staphylococcus aureus* and *Eschericia coli* bacteria.
Aim : Analyzing the effect of various solvents for the extraction of secondary metabolite content, as well as the antibacterial potential of banana peel extract (*Musa sp*).
Method : This research is a non-experimental type of research with a literature review method using 5 (five) journals consisting of 1 (one) international journal and 4 (four) national journals accredited by SCOPUS and SINTA.
Research result : Mas banana peel extract, kepok banana and yellow kepok banana contain secondary metabolites, namely phenols, flavonoids, alkaloids, tannins, steroids and triterpenoids which have antibacterial activity against *Staphylococcus aureus* and *Eschericia coli* bacteria. The secondary metabolites were extracted by maceration method using acetone, ethanol, methanol and water as solvents, where each variety and solvent provided different inhibitory power.
Conclusion : Kepok banana peel extract (*Musa paradisiaca* L.) with 80% acetone solvent concentration of 0.06% was able to provide bacterial inhibitory activity with a strong category against *Staphylococcus aureus* (19.57 mm) and *Eschericia coli* (18.15 mm) bacteria.

Keywords : Banana peel, solvent, secondary metabolites, antibacterial