

Abstrak

ANALISIS FARMAKOLOGI DAN AKTIVITAS ANTIFUNGI EKSTRAK ETANOL BONGGOL PISANG KEPOK TERHADAP *Pityrosporum ovale*

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Latar Belakang: Ketombe adalah suatu keadaan anomali pada kulit kepala yang disebabkan oleh *Pityrosporum ovale*. Ketombe dapat diatasi dengan menggunakan tanaman obat yang mengandung senyawa antifungi. Secara empiris tanaman pisang kepok digunakan untuk mengatasi ketombe. Bonggol pisang telah diteliti mengandung senyawa antifungi. Penelitian ini bertujuan untuk mengetahui mutu simplisia bonggol pisang kepok dan diameter zona hambat ekstrak etanol bonggol pisang kepok terhadap *P. ovale*.

Metodologi: Penelitian ini merupakan penelitian eksperimental yang meliputi analisis farmakologi dan uji aktivitas antifungi. Analisis farmakologi meliputi uji makroskopik, mikroskopik, penetapan kadar abu, kadar sari larut air, kadar sari larut etanol dan kadar air. Skrining fitokimia menggunakan pereaksi kimia. Uji aktivitas antifungi menggunakan metode difusi Kirby bauer dengan konsentrasi 0,5%, 1%, 4%, 5%, 10%, 20% dan 40%. Hasil data uji dianalisis secara deskriptif dan uji statistik one way ANOVA dilanjut dengan uji post hoc LSD pada taraf kepercayaan 95%.

Hasil Penelitian: Hasil penelitian menunjukkan bahwa simplisia bonggol pisang kepok berbentuk persegi panjang dengan P: 2,5 cm dan L: 1,5 cm, berwarna coklat muda, tidak memiliki rasa dan bau mencirikan simplisia. Serbuk simplisia bonggol pisang kepok memiliki fragmen pengenal berupa trakea dan parenkim. Dari penetapan kadar abu, kadar sari larut air, kadar sari larut etanol dan kadar air diperoleh hasil berturut-turut 7,83%; 15,73%; 6,5% dan 5,43%. Ekstrak etanol terbukti mengandung senyawa tanin dan saponin. Semua konsentrasi ekstrak etanol bonggol pisang kepok dapat menghambat pertumbuhan *Pityrosporum ovale* dengan zona hambat berkisar 0,5-17,16 mm. Konsentrasi yang paling baik dari ekstrak ini yaitu pada konsentrasi 40%, yang memiliki aktivitas antifungi tergolong kuat dengan nilai $p=0,000$.

Kesimpulan: Simplisia bonggol pisang kepok memenuhi standar mutu simplisia yang baik menurut Materia Medika Indonesia Jilid V. Ekstrak etanol bonggol pisang kepok memiliki aktivitas antifungi terhadap *Pityrosporum ovale*.

Kata Kunci: Analisis Farmakologi, Bonggol Pisang Kepok, Aktivitas Antifungi, *Pityrosporum ovale*

Abstract

PHARMACOGNOSY ANALYSIS AND ANTIFUNGAL ACTIVITY IN ETHANOL EXTRACT OF KEPOK BANANA HUMP AGAINST *Pityrosporum ovale*

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Background: Dandruff is an anomolous condition on the scalp caused by *Pityrosporum ovale*. Dandruff can be overcome by using medical plants that contain antifungal compounds. Emperically kepok banana plants are used to overcome dandruff. The banana hump has been studied containing antifungal compounds. This study aims to determine the quality simplicia of kepok banana's hump and inhibition zone diameter the ethanol extract of kepok banana's hump against *P. ovale*.

Methodology: This research was an experimental study with pharmacognosy analysis and antifungal activity test. Pharmaognosy analysis included macroscopic and microscopic test, determination of ash content, water soluble extract, ethanol soluble extract and water content. Phytochemical screening was used chemical reagents. Antifungal activity test was used Kirby-bauer diffusion method at concentrations 0,5%, 1%, 4%, 5%, 10%, 20% and 40%. The data results were analyzed descriptively and statistic test of one way ANOVA continued with post hoc LSD test at 95% confidence level.

Results: The results showed that simplicia of kepok banana's hump had rectangular shape with P: 2,5 cm and L: 1,5 cm, the colour was light brown, had no taste and odor characterizing the simplicia. Simplicia powder of kepok banana's hump had identified fragments in the form of trachea and parenchyma. The data from determination of ash, water soluble extract, ethanol soluble extract and water content were obtained 7,83%; 15,73%; 6,5% and 5,43% respectively. Ethanol extract of kepok banana's hump had tannin and saponin compounds. All concentrations could inhibit *Pityrosporum ovale*'s growth at ranging zone 0,5-17,16 mm. The most effective concentration was 40% which had strong antifungal activity

Conclusion: Simplicia of kepok banana's hump was fulfilled the good simplicia quality standards according to Materia Medika Indonesia Volume V. The ethanol extract of kepok banana's hump had an antifungal activity against *Pityrosporum ovale*

Keywords: Pharmacognosy Analysis, Kepok Banana's Hump, Antifungal Activity, *Pityrosporum ovale*