

ANTIFUNGAL ACTIVITIES OF FREE-LIVING AMOEBAE CRUDE
EXTRACTS AGAINST *Microsporum gypseum*

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ANTIFUNGAL ACTIVITIES OF FREE-LIVING AMOEBAE CRUDE EXTRACTS
AGAINST *Microsporum gypseum*

By

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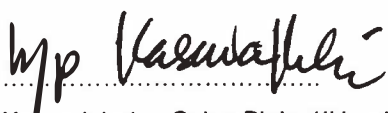

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LIST OF ABBREVIATIONS

Abs	-	absorbance
nm	-	nanometer
%	-	percentage
°C	-	Degree of Celcius
g	-	gram
ml	-	mililiter
mg	-	miligram
mg/ml	-	miligram per mililiter
µg/ml	-	micro gram per mililiter
µm	-	micro meter
L	-	Liter
µL	-	micro liter
cm	-	centimeter
-	-	negative

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ABSTRACT

The objectives of this research were to investigate the antifungal activities of two extracts from free-living amoebae *Acanthamoeba* sp (AK and P1) extracts on *Microsporium gypseum* by looking at their minimum inhibition concentration (MIC) values against the fungal species and identifying which amoeba extracts has the most potential in antifungal activities. In this study, extracts of two free-living amoebae obtained from *Acanthamoeba* sp (labelled as AK extract) and *Acanthamoeba* sp (labelled as P1 extract) were tested on *Microsporium gypseum*. *M.gypseum* is one of the pathogenic fungi that cause dermatophytosis, the infections of the skin, hair and nails. The amoeba extracts AK and P1 with various concentrations (6, 3, and 1.5mg/ml) and (2, 1, and 0.5mg/ml) respectively were used, for the test on the fungus. Results obtained from this study indicated that all the extracts used have no antifungal activity against *M.gypseum*. There was no inhibition zone observed at all concentration of the extracts used, indicating that both amoeba extracts have no antifungal activities.

AKTIVITI ANTIKULAT OLEH EKSTRAK AMEBA BEBAS MELAWAN

Microsporium gypseum

ABSTRAK

Objektif kajian ini untuk mengkaji aktiviti antikulat oleh dua ekstrak ameba bebas *Acanthamoeba* sp (AK dan P1) ke atas *Microsporium gypseum* dengan merujuk kepada nilai kepekatan perencatan minimum (MIC) melawan spesies kulat dan mengenalpasti jenis ameba yang paling berpotensi dalam aktiviti antikulat. Dalam kajian ini, dua ekstrak ameba bebas; didapati daripada *Acanthamoeba* sp (dilabel sebagai ekstrak AK) dan *Acanthamoeba* sp (dilabel sebagai ekstrak P1) telah diuji ke atas *Microsporium gypseum*. *M.gypseum* adalah satu daripada kulat yang bersifat patogenik yang menyebabkan dermatophisis, jangkitan pada kulit, rambut dan kuku. Ekstrak ameba AK dan P1 dengan kepekatan yang pelbagai (6mg/ml, 3mg/ml, dan 1.5mg/ml) dan (2mg/ml, 1 mg/ml, dan 0.5mg/ml) digunakan untuk diuji ke atas kulat ini. Keputusan yang didapati daripada kajian ini menunjukkan kesemua ekstrak yang digunakan tidak mempunyai aktiviti antikulat untuk melawan *M.gypseum*. Tiada zon perencatan yang dapat dilihat pada kesemua kepekatan ekstrak yang digunakan, menunjukkan bahawa kedua-dua ekstrak ameba tidak menunjukkan aktiviti antikulat.