



**EFFECT OF METHANOLIC LEAVES EXTRACT OF *Andrographis paniculata*
ON FUNGUS ISOLATED FROM THE FINAL YEAR PROJECT (FYP)
LABORATORY, MEDICAL LABORATORY TECHNOLOGY (MLT) CENTRE,
FACULTY OF HEALTH SCIENCES, UITM SELANGOR, PUNCAK ALAM**

By

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**Thesis Submitted in Partial Fulfillment for the Degree of Bachelor of Medical
Laboratory Technology (Hons), Faculty of Health Sciences; Universiti Teknologi
MARA**

2017

DECLARATION

“I hereby declare that this thesis entitled Effect of Methanolic Leaves Extract of *Andrographis Paniculata* on Fungus Isolated from The Final Year Project (FYP) Laboratory, Medical Laboratory Technology (MLT) Centre, Faculty of Health Sciences, UiTM Selangor, Puncak Alam is based on my original work and has not has been submitted previously or currently for any other degree at UiTM or any other institutions.”

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ACKNOWLEDGEMENT

Thanks to Allah The Almighty for all His Mercy, Grace and Guidance that enable me to accomplish my final research project in a mean time, and also in a good health along the journey.

I submit my heartiest gratitude to my respected supervisor, Dr. Roslinah Mohamad Hussain for all of her continuous guidance, support, encouragement, time, and advice for completing this project. Her outstanding guidance throughout this project really encouraged me to accomplish this project and I am so glad that I am performing this project under her supervision.

I would like to thank the Medical Laboratory Technology Centre, Faculty of Health Sciences for providing all the facilities in order to complete this project. I am deeply indebted too to all the lecturers and the lab staffs of Medical Laboratory Technology Centre for their cooperation, guidance, assistance and valuable advices during my lab works.

My joy knows no bounds in expressing my cordial gratitude to all my teammates; Nur Athirah Aminuddin, Nur Nabilah Tan, Izyan Nadhirah Yazid and Siti Rahimah Yusof for every kind assistance, ideas and cooperation rendered in making our projects successful. My sincere gratitude also goes to postgraduate student; Zayan Nabilah for her guidance and knowledge sharing, as well for her kindness in helping to complete this study. Same gratitude goes to my batch mates for their support and contributions along this project.

Last but not least, I dedicate this project to my beloved parents; Mr. Misri Yahya and Mdm. Rosmawati Abd Samad, my siblings for their unstoppable supports and guidance until I have successfully completed this study.

Finally, I humbly extend my thanks to all the following personnel and all those who have been not intentionally left out for their assistance and co-operation rendered throughout the study, as without them it would be impossible to compile this thesis.

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ABSTRACT

Effect of Methanolic Leaves Extract of *Andrographis paniculata* on Fungus Isolated from the Final Year Project (FYP) Laboratory, Medical Laboratory Technology (MLT) Centre, Faculty of Health Sciences, UiTM Selangor, Puncak Alam.

Fungus comprises of a diverse group of heterotrophs, where many are saprophytes that digest dead organic matter and organic wastes. Fungal contamination, however, can affect the structural integrity of a building and also affects the humans' olfactory systems by mycotoxins. As herbal plants have antifungal properties such as tannins, terpenoids and flavonoids, this study aims to investigate the antifungal activity of *Andrographis paniculata* methanolic leaves extract against a fungus isolated and identified. Fungus was isolated from Final Year Project (FYP) Laboratory by air sampling onto Sabouraud Dextrose Agar (SDA). Agar plates were incubated in room temperature which is 28°C for about 3 to 7 days. Pure culture of fungus was presumptively identified using morphological (macroscopic) and microscopic characterization, where Lactophenol Cotton Blue Stain (LPCB) was used. The antifungal activity of methanolic leaves extract of *Andrographis paniculata* was evaluated on selected fungal isolate by using disc diffusion method at concentrations of 1000, 500, 250, 125, 62.5, 31.25 mg/mL respectively, that were diluted in DMSO (10%). *Aspergillus* spp. and *Rhizopus* spp. were presumptively identified by both macroscopic and microscopic characterization of two fungal isolates that grew on SDA. In other hand, no inhibitory effects were observed against *Aspergillus* spp. (selected fungus) using different concentrations of *Andrographis paniculata* methanolic leaves extract. The study showed that two species of fungi were isolated from FYP laboratory which were presumptively identified as *Aspergillus* spp. and *Rhizopus* spp. However, it is suggested to do molecular analysis for accurate confirmation of fungi. The *Andrographis paniculata* methanolic extract used in this study failed to express any antifungal activity probably because it was less stable.

Keywords: *Andrographis paniculata*, Antifungal activity, Fungus, Fungal Identification, Puncak Alam.