

UNIVERSITI TEKNOLOGI MARA

Antimicrobial Activity of Crude Extract from *Alocasia ovalifolia* Against Pathogenic Microorganism

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ABSTRACT

Traditional plants have been used in the medicinal practice since hundred years ago. Most of these plants were claimed to have great therapeutic activities against various diseases. This study is pertaining to determine the antimicrobial activity from *Alocasia ovalifolia*, to determine Minimum Lethal Concentration (MLC) & Minimum Inhibitory Concentration (MIC) of crude extract from *Alocasia ovalifolia*, and to determine the effect of bacteriocidal, yeastocidal, and fungicidal of the crude extract on selected pathogenic microorganisms within specific interval time. Many studies reported the potential biological activities of traditional plant. *Alocasia ovalifolia* has an antimicrobial effect toward bacteria, some species of yeast and not for fungi. However, only few scientific evidences have proved all these claims and further investigation should be conducted to examine the chemical compositions of *Alocasia ovalifolia*.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Nature has been a source of medicinal agents for thousands of years and an impressive number of modern drugs have been isolated from natural sources, many based on their use in traditional medicine. Various medicinal plants have been used for years in daily life to treat disease all over the world. They have been used as a source of medicine. The widespread use of herbal remedies and healthcare preparations, such as those described in ancient texts like the Vedas and the Bible, has been traced to the occurrence of natural products with medicinal properties. In fact, plants produce a diverse range of bioactive molecules, making them a rich source of different types of medicines. Higher plants, as sources of medicinal compounds, have continued to play a dominant role in the maintenance of human health since ancient times. Over 50% of all modern clinical drugs are of natural product origin and natural products play an important role in drug development programs in the pharmaceutical industry. (Nair *et al.*, 2004)

There has been a revival of interest in herbal medicines. This is due to increased awareness of the limited ability of synthetic pharmaceutical products to control major diseases and the need to discover new molecular structures as lead compounds