

**ANTIOXIDANT ACTIVITY OF METHANOL AND WATER EXTRACTS  
FROM THE LEAVES OF *Ficus deltoidea* var *angustifolia* sp.  
USING FTC AND TBA METHODS**

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## **ABSTRACT**

### **ANTIOXIDANT ACTIVITY OF METHANOL AND WATER EXTRACTS FROM THE LEAVES OF *Ficus deltoidea* var *angustifolia* sp. USING FTC AND TBA METHODS**

This research was conducted to evaluate the antioxidant activity of methanol and water extracts from the leaves of *Ficus deltoidea* var *angustifolia* species. The sample was divided into two different ways of extraction which were methanol and water extraction. The antioxidant activity was measured using FTC and TBA methods and all extracts showed strong antioxidant activity within the range 81-82% and 74-76% respectively. The result obtained showed that both methods have similar pattern of antioxidant activity.

## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

Malaysia tropical rain forest is unique with the huge number of valuable plants. The discovery of herbal plants in these forest, is now receiving international recognition for its medicinal values and health benefits. A new herbal family that has been scientifically researched is *Moraceae*. The *Moraceae* family is highly diverse in morphology of both vegetative and reproductive structures. It includes the genus of *Ficus*.

The species of *Ficus deltoidea* (Mistletoe fig) is gaining popularity among the local herbal practitioners. In Malaysia, this plant is also known as 'Mas Cotek'. *Ficus deltoidea* is an epiphyte and usually can be found growing on the branches of higher plants. All the parts of the plant such as fruits, leaves, stems and roots can be used as medicine.

*Ficus deltoidea* plants can grow 2-3 meter high and normally grows up to 2 meter after planting for 8 months in the farm. The different shape of the leaves represents different variety some having rounded shape and also elongated egg shape. The top of the leaf is shining green in color while under it, the surface is golden yellow in color with black spots in between the leaf veins (v-shaped). *Ficus deltoidea* plant species are male and female. The leaves of female species