## UNIVERSITI TEKNOLOGI MARA

# MALAYSIAN TRADITIONAL HERBS: INHIBITION OF TRADITIONAL HERBS ON CYP2D6 ENZYME

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### **ABSTRACT**

Herbal medicines usually had been taken concomitantly with the conventional drugs. The metabolism of both of them might be in the same cytochrome P450; CYP2D6. The purpose of this study was to investigate the effect of these herbs on the CYP2D6 enzyme using fluorogenic kits; Vivid® CYP2D6 Screening Kits (USA). The results obtained were all of the herbs tested showed positive inhibition except for the herbs; Pinang, Selasih, Senduduk, Serai Wangi, Tenggek Burung, Terung Pipit, Tongkat Ali and Mas Cotek. These results indicate that many Malaysian traditional herbs extracts had an inhibitory effect on CYP2D6.

### **CHAPTER 1**

#### INTRODUCTION

#### 1.1. Introduction

Herbal medicines popularity is increasing nowadays. They have been prescribed as over the counter preparations. People tend to obtain herbal medicines because of dissatisfaction over the conventional drugs and seek for more natural lifestyle. However, they misinterpreted herbal medicines, which come from natural origin to have fewer side effects than the conventional drugs. They are not aware that in fact most of herbal medicines contain mixtures of different pharmacologically active constituents which may increase the likely to have interactions when administered along with other conventional drugs. The interactions between them can result in either induction or inhibition of the cytochromes P450 (CYP450). However, most of study done showed the inhibitory activity by the herbal preparations (Venkataramanan et al., 2006).