CHAPTER I

INTRODUCTION

With the advent of Fourier transform methods and computer technology. ^{13}C NMR has become a sensitive and powerful tool in the structure elucidation of natural product and studies of chemical conformation. Althrough at present , there have been ^{13}C NMR data of various organic substance. But the availability of ^{13}C NMR data on coumarinoid in the literature is still scarce, despite the abundance of this moity in plant natural products and its important use in pharmacuetical. Part of the scarcity of data can be attributed to the chemical shift assignment especially for a new class of compound.

Clausena cambodiana Guill. (Rutaceae) is a small tree, widely distributed in the southern part of Thailand. The dried roots and stems are used for various purpose including treatment of stomachica , dermatology and astringent in the folk medicine. It has been reported that several species of the genera Clausena. contain pyranocoumarin (1-5) but no ^{13}C NMR study has been report . This investigation will main on assignment ^{13}C NMR for the chemical constituent that are isolated from Clausena cambodiana Guill.