

ABSTRACT

THE CHEMICAL CONSTITUENTS OF *LANTANA CAMARA* (*VERBENACEAE*), *CALOPHYLLUM CALABA* (*GUTTIFERAE*), AND *BRYOPHYLLUM PINNATUM* (*CRASSULACEAE*).

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The thesis is segmented into six chapters.

The first chapter contains a review of the genus *Lantana*. This review describes the major phytochemicals found within this genus. It was found that triterpenes are the major chemical components however, flavonoid and phenyl propanoid glycosides and furanonaphthoquinones have also been isolated from members of this genus.

Chapter two addresses the chemical investigation of *Lantana camara* (Common Pink variety) and reports the isolation of five triterpenes.

Chapter three deals with a review of the genus *Calophyllum*. In this review most of the major phytochemicals produced by members of this genus are reported.

These include biflavonoids, coumarins, neoflavonoids, triterpenoids and xanthenes.

Chapter four is directed toward the chemical investigation of *Calophyllum calaba*. Six compounds were isolated during this investigation, these being three friedelane triterpenes, two xanthenes and one neoflavonoid.

Chapter five entails a brief review of the genus *Bryophyllum* a.k.a. *Kalanchoe* with a description of its major phytochemicals. The major compounds isolated from this genus are the bufadienolides but the genus is rich phytochemically and produces hydrocarbons, phenanthrenes, flavonoid glycosides and triterpenes.

Chapter six deals with the chemical investigation of *Bryophyllum pinnatum* and reports the isolation and structure elucidation of two nitrile-containing compounds and a flavonoid glycoside.

Keywords: Graeme Richard Montgomery Corbin; *Lantana*; *Calophyllum* and *Bryophyllum*.