

**ABSTRACT**

**COMPOUNDS FROM *ADLANTUM***

**(POLYPODIACEAE) AND *PEPEROMIA***

**(PIPERACEAE)**

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This thesis is divided into two sections, Section A and Section B. Section A consists of Chapters 1 and 2. Chapter 1 is a literature review of the genus *Adiantum*. Chapter 2 is a description of the isolation and structure elucidation of compounds A and B from the *Adiantum* species, *Adiantum pulverulentum* var. *caudatum*.

Section B contains five chapters, Chapters 3 to 7. Chapter 3 is a literature review of the genus *Peperomia*. Chapter 4 describes the isolation and tentative characterization of compounds C and D. The biogenetic pathways for the precursors to these compounds are also discussed. Chapter 5 gives an account of the isolation and characterization of a novel prenylated benzopyrancarboxylic acid, compound E. Chapter 6 is a description of the preparation of derivatives of compound E, compounds F-H. Finally, Chapter 7 is a discussion of the bioactivity of compound E.