

A B S T R A C T

This thesis deals with the phytochemical investigation of four (4) local plants.

In Part I *Marsypianthes chamaedrys* (Labiatae) is examined. A short review of the biologically active triterpenes found in the Labiatae is followed by an account of the isolation and identification of six (6) pentacyclic triterpenic acids.

Part II gives a brief introduction to *Cordia curassavica* (Boraginaceae) and related species that are widely used in folk medicine. This is followed by a report of the natural products isolated from this group of plants. The chemistry of the three (3) flavones found in *C. curassavica* is discussed.

Part III consists of:-

- i) A brief outline of studies done on members of the genus *Ocotea*.
- ii) An introduction to the Chemistry of Lignans with special reference to the furofurano-bicyclooctanes.
- iii) The structure and stereochemistry of the lignans (+)-eudesmin and phillygenol, isolated from *Ocotea canaliculata* (Lauraceae).

Phillygenol has been isolated as a natural product for the first time.

Part IV comprises a short report on previous studies of *Atalantia buxifolia* (Rutaceae) and a discussion of our investigations of this plant. The latter shows the occurrence of three (3) compounds, β -sitosterol, 6-(D,L-2',3'-dihydroxy-3'-methylbutyl)-7-methoxy coumarin and angular 5,4'-dihydroxy-6'',6''-dimethyl pyrano [2'',3'':7,8] flavone, which have not been isolated before from this plant. The structure of the non-linear flavone is established for the first time. The variation in the constituents of this plant is not surprising since it is well known that the constituents of a plant may vary significantly with location and climatic conditions.