

ABSTRACT

CHARACTERISATION OF ASBESTINANE, BRIARANE AND BRIARELLANE DITERPENOIDS FROM BARBADIAN *BRIAREUM* *ASBESTINUM* AND *ERYTHROPODIUM CARIBAEORUM*

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This thesis is divided into three chapters:

A review of the gorgonian octocoral, *Briareum asbestinum* is presented in chapter one. It discusses the previously isolated asbestinanes, briaranes and briarellanes from this organism.

A chemical investigation of *Briareum asbestinum* is reported in chapter two. Further investigation of *Briareum asbestinum* resulted in the isolation of three briarellane diterpenes, the known briarellin D and two which have not been previously reported, as well as the two briarane diterpenes, briarein B and D.

A review as well as a chemical investigation of the gorgonian octocoral, *Erythropodium caribaeorum* is dealt with in chapter three. The briarane diterpenes, erythrolides, previously isolated from this compound are discussed. Further investigation of this gorgonian octocoral resulted in the isolation of five

briarane diterpenes, one of, which was novel, while the other four were the erythrolides A, B, C, and E-3-acetate.