ABSTRACT

In recent years many interesting natural products have been obtained from members of the *Croton* genus. Nearly fifty species have so far been examined and from these, alkaloids have been isolated. Diterpenoid compounds have also isolated and at least one species, *C. rhamnifolius* previous to this work has been known to yield alkaloids as well as diterpenes. *C. linearis* is now known to also yield alkaloids and diterpenoids.

Part I of this thesis consists of two reviews. The first examines the folk-medicinal uses of some *Croton* species. The second looks at the diterpenes isolated from 1984 to the present, from the genus *Croton* (Euphorbiaceae).

Part II presents an investigation of *Croton linearis* (Euphorbiaceae). In the first section, two novel diterpenes, compounds A and B, were isolated. Compounds A and B are diterpenes of similar structure but have different functionalities present. The second section involves reactions which confirmed the structures of the two novel diterpenes.