

ABSTRACT

In Part I of this thesis the isolation of some of the constituents of Croton corylifolius (Euphorbiaceae) and the characterisation of some diterpenoids found in this plant are described. The structure, stereochemistry and absolute configuration of a new furano-diterpene are discussed. The chemical and physical data which revealed the structure and stereochemistry of a novel tricyclic diterpenoid, Crotofolin A are presented. Strong evidence for a crotofolin carbon skeleton for two new diterpenoids, corylifolin and isocorylifolin is also presented. A plausible biogenesis of Crotofolin A is also discussed. Preliminary results are reported on Compound C to which a tiglian carbon skeleton is suggested.

In Part II the isolation and characterisation of some known sesquiterpenoids, hyenanchin (from Picrodendron baccatum), cedrol and widdrol (from Juniperus leucayana) are discussed. The discovery of the compound hyenanchin has defined the family to which the genus Picrodendron belongs.