

## ABSTRACT.

In part I of this thesis, the acid catalysed cyclization of the macrocyclic diterpene, ovatodiolide, is studied using mainly PMR spectral data. The stereochemistry of the cyclized products is supported by PMR spectral data and Circular Dichroism data. General survey on macrocyclic diterpenes which are recently found by other chemists and a proposed biogenetic development of ovatodiolide are reported.

In part II, the known structures, taraxerol and taraxerone, which are isolated from Acidoton urens are presented together with a study on PMR spectral chemical shifts of olefinic protons of triterpenes.

In part III, the known structure, kaurenoic acid, isolated from Eupatorium parviflorum, and an unusual hydrogenation using hydrazine are reported, and preliminary chemical investigation of the extracts of the species E. villosum is discussed.