

## ABSTRACT

The contents of this thesis are presented in two parts:

Part I describes analyses carried out on four Dioscorea species cultivated in Jamaica viz. D. alata, D. cayenensis, D. rotundata and D. trifida. The tubers of these plants were analysed to determine their composition with respect to starch, moisture, protein and reducing sugar.

Part II describes investigations of the structure of the mucilage of D. rotundata. The results indicate that the mucilage is a homopolymer containing  $\beta$ -(1→4) linked mannose units.