

## COMPARATIVE STUDIES OF PLANT SUGARS AS PART OF BIOMASS CHARACTERIZATION AND EVALUATION

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Biological materials however, often contain disproportionate amounts of carbohydrates and this large quantity of one carbohydrate can often mask the detection of a smaller quantity of another. The present work aims at investigating the total carbohydrate content, amino acid content and the presence of monosaccharides in the mango seeds, litchi seeds, avocado seeds, macademia shells and macademia nuts and waste material. In this investigation, the sugars extracted were analyzed by Thin Layer Chromatography (TLC) using ethyl acetate:isopropanol:water:pyridine solvent system. no conclusive results were obtained but analysis with High performance liquid chromatography (HPLC) and Gas liquid chromatography (GLC) gave identification of the following monosaccharides, xylose, glucose, galactose and mannose. Arabinose and rhamnose were found in trace amounts. the results obtained showed that the high oil content of some of the fractions can make waste material a good source of oil production, whilst sugars can play a role in nutrition. Antibacterial activity of the waste material was confirmed in this study

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