CHARACTERIZATION OF THE PURIFIED EXTRACT FROM SOLO PAPAYA (Carica papaya Linnaeus) LEAVES

An Undergraduate Thesis
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In partial fulfillment of the requirements for the degree of Bachelor of Science in Chemistry



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ABSTRACT

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The study, "Characterization of the Purified Extract from Solo Papaya (Carica papaya Linnaeus) Leaves" was conducted at the laboratory room of the Department of Physical Sciences from October 1999 to February 2000 to isolate and characterize the present components in papaya leaves.

Air-dried leaves of solo *Carica papaya Linnaeus*, locally known as papaya were homogenized in ethanol. The ethanoic extract was fractionated by solvent partitioning using hexane and chloroform as solvents. The chloroform extract was subjected to thin layer chromatography which produced fourteen fractions, all of which were characterized through their boiling points, uv-vis spectra and phytochemical screening procedures.

Results showed that Fractions 5, 6, 8, 9, and 12 contain saponins while Fractions 3 and 7 contains tannins. All isolates contain alkaloids and cardiac glycosides and are not capable of intermolecular H-bonding. Fractions 1, 3, 5, 6, 8 and 12 which exhibited a λ_{max} value of 390 nm contain a lesser amount of conjugation in their structures relative to other isolates (2, 4, 7,9, 10, 11, 13 and 14) which recorded λ_{max} values of 490 nm, 550nm and 750 nm.

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