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Antibacterial and Antityrosinase Activity of Isolated Compounds from Stem Bark of Ficus platyphylla Del

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Abstract : An investigation of the chemical constituents into the stem bark of Ficus platyphylla (Moraceae) has resulted in the isolation of hordenine, epicatechin, lupeol, lupeol acetate and α-amyrin acetate. Their structures were determined using spectroscopic data as well as comparison with literature data. The antibacterial assay has been tested against Gram positive and Gram negative bacteria, while the tyrosinase inhibition assay was examined using L-Dopa as a substrate of mushroom tyrosinase enzyme. hordenine, epicatechin, lupeol, lupeol acetate and α-amyrin acetate showed minimum inhibition concentration (MIC) values in the range of 225-900 µg/mL against the bacterial strains. Lupeol, lupeol acetate and α-amyrin acetate showed significant antityrosinase activity against mushroom tyrosinase enzyme with percent inhibition of 67.7%, 66.2% and 62.2%, respectively.

Keywords : antibacterial, antityrosinase, chemical constituents, Ficus platyphylla
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