SOME PHENOLIC COMPOUNDS FROM STEM BARK OF MELINJO (*GNETUM GNEMON*) AND THEIR ACTIVITY TEST AS ANTIOXIDANT AND UV-B PROTECTION

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Isolation and structure elucidation of three phenolic compounds, namely 3,4-dimethoxychlorogenic acid (1), resveratrol (2), and 3-methoxyresveratrol (3) from stem bark of Melinjo *(Gnetum gnemon)* had been done. The isolation of those compounds was carried out by chromatographyc method and structure elucidation was performed by interpretation of spectroscopic data, including UV, IR, ^{1}H and ^{13}C NMR 1D and 2D, and FABMS. The result of this study showed that activity each compounds as radical hydroxyl scavenger of 3,4-dimethoxychlorogenic acid (3), resveratrol (2), and 3-methoxyresveratrol (3), with an IC_{50} 523,7; 45,17; and 60,12; μg/ml respectively. Each compound showed significant activity as UV-B protection. Activity test as UV-B protection showed that resveratrol and methoxyresveratrol have maximum protections (SPF 8,03 and 12,34 respectively), and 3,4-dimethoxychlorogenic acid has minimum protection (SPF 2,55), each compounds on 50 μg/ml.

Key word : melinjo; Gnetum gnemon; natural antioxidant; UV-B protection

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