



Isolation of Angiotensin Converting Enzyme (ACE) Inhibitory Activity Quercetin from *Peperomia pellucida*

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Abstract : *Peperomia pellucida* (L.) Kunth. (Piperaceae) is empirically used in traditional medicine to control blood pressure. The objective of this study was to isolate ACE inhibitor from aerial part of the plant. Using chromatography technique was isolated flavonoid as ACE inhibitor. The chemical structure was determined as 3',4', Dihydroxy-3-5-dimethoxy flavone-7-O- β -rhamnose based on the spectral data (UV, IR, LC-MS, ¹H-NMR, ¹³C-NMR, and 2D-NMR) and compared with that reference. *In vitro* assay of ACE inhibitory activity that showed IC₅₀ of the compound was 7.72 μ g/mL. The result of kinetic suggested that the compound inhibit the enzyme activity by competing with the substrate for the active site. The results supported the traditional use of the plant antihypertensive.

Key words : *Peperomia pellucida*, ACE, isolation, antihypertensive, flavonoid.

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