

P-79**Angiotensin Converting Enzyme Inhibitory Effect of Standardised Extracts from Various Varieties of *Ficus Deltoidea***

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Ficus deltoidea (Moraceae), Mas cotek, is a local medicinal plant which has been used for its health benefits including antioxidant, improving blood circulation and anti-hypertension effects. This study aims to determine the vitexin and isovitexin content in various varieties of *F. deltoidea*, and to study the extract's inhibitory effect on angiotensin converting enzyme (ACE) activity as anti-hypertension marker. Five varieties were studied including *F. deltoidea* var *deltoidea*, *F. deltoidea* var. *angustifolia*, *F. deltoidea* var *tranguensis*, *F. deltoidea* var. *Telinga Beruk*, and *F. deltoidea* var. *Tapak Itik*. Five extracts were prepared; water, methanolic, ethanolic, 50% methanolic and 50% ethanolic, and ACE inhibitory effect was studied *in vitro*. Vitexin and isovitexin concentration was in the range 0.001–0.35% and 0.001–7.025% (w/w), respectively. The highest ACE inhibition was obtained from *F. deltoidea* var. *Tapak Itik* (FD-TI) extracts where the 50% ethanolic and 50% methanolic extracts showed the most promising results. A bivariate correlation analysis may indicate existence of relation between vitexin in FD extracts and the ACE inhibition ($r = 0.58$), whereas the isovitexin results do not show any relationship ($r = -0.06$). The median inhibitory concentration (IC_{50}) of the 50% ethanolic extract of FD-TI was $22 \pm 3.8 \mu\text{g/ml}$, and that of vitexin and isovitexin was $3.1 \pm 0.5 \mu\text{g/ml}$, $18.6 \pm 1.3 \mu\text{g/ml}$, respectively. Our results showed the ACE inhibitory effect is partly due to existence of vitexin but not isovitexin, and the 50% ethanolic extract of the *F. deltoidea* var. *Tapak Itik* as a possible anti-hypertension candidate.

Keywords: Vitexin, Isovitexin, *Ficus deltoidea*, Anti-hypertension.
