

ABSTRACT**Development and Method Validation for Determination of
Morachalcone A in Rabbit Plasma *In Vitro* by HPLC**

Artocarpus champeden ethanol extract has been reported as antimalarial and prospect to developed as phytomedicine products which morachalcone A was determined as it's active marker compound. To support the development of phytomedicine products from *Artocarpus champeden* especially in bioavailability and clinical study, a selective and sensitive analytical method becomes important for the determination of morachalcone A in blood plasma. The aim of this study was to develop and validate selectivity and sensitivity of HPLC method for determination of morachalcone A in rabbit plasma. This method was performed using a RP-C18 Column (250 x 4.6 mm i.d., 5 µm particle size), under isocratic elution with acetonitrile : water (50:50 v/v), detection was carried out at 368 nm and analyses were run at a flow rate of 1,0 mL/min, 4-hydroxychalcone and methanol were used as internal standard and precipitate agent. The results showed that this method was selective and good linearity in range of 3096,774-154.839 ng/mL for morachalcone A in rabbit plasma. LOD and LLOQ were found 89.384 and 154.839 ng/mL, respectively. The mean difference method was found between 2,79-14.33%. The intra-day and inter-day precision were both lower than 15% and recovery from extraction method from morachalcone A and Internal Standard were 80-120%.

Key words : HPLC, method validation, morachalcone A, rabbit plasma, *Artocarpus champeden*