

ABSTRACT

**DETERMINATION OF QUERCETIN CONCENTRATION IN
Annona muricata L. LEAF'S SYRUP BY USING UV-
SPECTROPHOTOMETRIC METHOD**

Quercetin is a flavonoid compound that contain in *Annona muricata* L. leaves. UV Spectrophotometric method was used in determination of quercetin from *Annona muricata* in syrup. Degree of validation can be determined by selectivity, linierity, accuracy, precision, LOD, and LOQ. Selectivity showed that spectra have maximum wavelength at $\lambda=374$ nm. The good linearity was showed from concentration 3,2 $\mu\text{g/ml}$ to 9,6 $\mu\text{g/ml}$ with correlation coefficient $r = 0,9984$ and $V_{xo} = 2,87\%$. Precision of quercetin standard showed relative standar deviation (RSD) 0,19%. LOD and LOQ of quercetin standard showed 0,0240 $\mu\text{g/ml}$ and 0,0801 $\mu\text{g/ml}$ respectively and the accuracy was 91,86%. Determination of quercetin concentration in *Annona muricata* leaf extract was $12,62 \pm 3,29\%$ and $(263,962 \pm 6,6935)$ mg in 10 ml syrup.

Keyword : Quercetin, *Annona muricata* L., UV Spectrophotometric, validation