

## ABSTRACT

Abd Fata NIM 2148202001 <i>SI Community and Clinical Pharmacy</i>	<i>Advisor</i> Apt. M. Shofwan Haris, S.Farm., M.A.P., M.Farm. NIDN: 0717038802
---	---

**THE PENETAPAN KADAR QUERCETIN PADA FRAKSI EKSTRAK  
DAUN KELOR (*Moringa oleifera Lmk*) MENGGUNAKAN METODE HPLC  
(*High Performance Liquid Chromatography*)**

### **ABSTRACT**

*Moringa leaves contain 539 compounds that are very well known in medicine to prevent more than 300 diseases such as anti-inflammatory, diuretic, anti-hypertension, lower cholesterol, antioxidant, and anti-fungal. One of the contents is quercetin which can prevent the oxidation process, antiviral, immunomodulator, anti-hypertension and anti-cancer but has not been determined by HPLC. HPLC conditions: mobile phase methanol water 80:20 and stationary phase C18 (4.6 X 250 mm). The purpose of this study is to determine the determination of quercetin levels in the extract fraction of Moringa leaves (*Moringa Oleifera Lmk*) using the HPLC method.*

*This research design used laboratory experiments, namely system suitability tests, precision, accuracy, linearity, limit of detection, limit of quantification and determination of quercetin levels. The extraction method used is soxhlet with 96% ethanol solvent (1:4) and fractionation of n-hexane, n-butanol and ethyl acetate (1:8).*

*The observation results of the validation method carried out were the suitability of the SBR system 0.0011%, linearity ( $y = 44.352x - 32.549$ ;  $R^2 = 0.9951$ ), limit of detection ( $0.5431 \mu\text{g} / \text{ml}$ ), limit of quantification ( $1.8104 \mu\text{g} / \text{ml}$ ) accuracy (101.75%), and precision (1.23%) which were known to have met the specifications. The quercetin level in the ethanol 96% moringa leaves extract fraction was 0.783 ppm on average.*

*Identifying and also determining other compounds contained in Moringa leaves (*Moringa oleifera Lmk*) such as flavones, flavanones, etc. using HPLC in order to gain new insights.*

**Keywords: Quercetin, HPLC, Moringa Leaves**