

ABSTRACT

DETERMINATION OF TOTAL FLAVONOID CONTENT OF 96% ETHANOL EXTRACT JAVANESE LONG PEPPER (*Piper retrofractum* Vahl.) USING 2 SIMPLICIAN DRYING METHODS

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*Javanese long pepper (*Piper retrofractum* Vahl.) is one of the medicinal plants from the Piperaceae family that grows in Indonesia. Javanese long pepper is also known to contain secondary metabolites from the amide group, alkaloids, steroids, flavonoids, saponins, phenolic acids, terpenoids, and lignin. Flavonoids are plant pigments that produce red or blue flowers with yellow pigmentation on the petals which are used to attract pollinators. Flavonoids are natural phenolic compounds that have potential as antioxidants and have bioactivity as drugs with a C6-C3-C6 chemical structure. This study aims to determine the total flavonoid content contained in Javanese long pepper using 2 different drying methods. This study uses 2 methods, namely method I (wind) and method II (pre-treatment blanching). The reason for using these 2 methods is because the method is very simple and easy to do, while the artificial drying method requires special equipment. Produce a regression equation that is $y = 0.0056x - 0.0378$ with a correlation coefficient value (r) = 0.986. In determining the levels of flavonoids with extract methods I and II with 3 times replication, the absorption was measured using visible spectrophotometry at a maximum wavelength of 414nm. The value of each absorbance of the sample was entered into the linear regression equation of the standard solution of quercetin to obtain the result that the highest flavonoid content was the method II, which was 47.8287 mg QE/g extract.*

Keywords: *Javanese long pepper, flavonoids, drying, spectrophotometer, extract, QE content*