ABSTRACT

DETERMINATION OF TOTAL PHENOL CONTENT IN ETHANOL 80% EXTRACT 80% ROSEMARY (*Rosemarinus officinalis* L.) MACERATION METHOD USING UV-Vis SPECTROPHOTOMETRY

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Rosemary (Rosmarinus officinalis) is widely used for medicinal purposes, reducing fever, cooking spices, aromatherapy, digestion, respiratory tract and also as an antioxidant. Seeing the many benefits of rosemary (Rosmarinus officinalis L), it is necessary to develop research. Therefore, this study was conducted to determine the total phenol levels contained in 80% ethanol rosemary extract (Rosmarinus officinalis L) maceration method using the spectrophotometry method. The ethanol extract of rosemary leaves then determines the total phenol levels using the UV-Vis spectroscopic method. The process begins with the determination of the operating time within a 5-minute interval to find the time needed. To produce maximum absorption at the 100th minute. Then a raw solution of grease acid with a concentration range of 7.5 10, 12.5 15 17.5 ppm is produced which then produces a linear regression equation $y = 0.0259 \times + 0.2501$ with the value of the correlation coefficient (r) 0, 9202. The sample methanol extract of rosemary leaves was then weighed with three replications to measure its absorption using the UV-Vis spectroscopic photometry method by entering the absorbance value on the linear regression equation. The results of this study showed that the average total phenol content was 11,6126 mg GAE/g of extract.

Keywords: rosemary, ethanol 80%, total phenol