ABSTRACT

DETERMINATION OF TOTAL PHENOL CONTENT IN 80% ETANOL EXTRACT OF ROSEMARY (*Rosmarinus officinalis* L.) METHOD OF DIGESTI BY USING UV-VIS SPECTROFOTOMETRY METHODS

I Made Ngurah Rio Juliana

Rosemary (Rosmarinus officinalis L.) is a traditional medicinal plant from the lamiaceae family that has long been used as a mild stimulant and analgesic. Rosemary leaves are known to contain strong antioxidant compounds that play a role in biological activities, including antidiabetes and anticancer. In addition to containing strong antioxidant compounds, rosemary leaves contain various polyphenolic compounds including flavonoid compounds carnosol acid, rosmadial, rosmaniac acid and rosmaridipenol which have various benefits as medicinal and antiviral ingredients. The purpose of this study was to determine the total phenol content of rosemary ethanol extract by digestion method using UV-Vis Spectrophotometry method. Determination of total phenol content in thick ethanol extract of rosemary leaves was replicated 3 times and weighed 35 mg each, then measured the absorbance using UV-Vis spectrophotometry at a maximum λ of 747 nm. The value of each sample absorbance was entered into the linear regression equation of gallic acid standard solution, obtained the results of replication 1 =29,4151, replication 2 = 26,4598, replication 3 = 27,0501 and the average total phenol content of rosemary leaf ethanol extract was 27,6416 mg GAE/g extract.

Keywords: Rosemary (Rosmarinus officinalis L.), 80% Ethanol, Total phenolics