

ABSTRACT

DETERMINATION OF TOTAL FENOL CONTENT OF 96% ETANOL EXTRACT OF BLACK SIRIH LEAVES (*Piper betle* var. *nigra*) USING UV-VIS SPECTROFOTOMETRY METHODS

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Black betel leaf (*Piper betle* var. *nigra*) is one of the medicinal plants from the Piperaceae family. Determination of total phenol content is to determine the phenolate content of ethanol extract of black betel leaf. This study conducted sampling at UPT Materia Medica Batu city in the form of dry leaves. The purpose of this study was to determine the total phenol content of ethanol extract of black betel leaves using the UV-Vis Spectrophotometric method. In this study using black betel leaves as samples and maceration was carried out. After getting the maceration results then concentrated with a rotary evaporator, obtained a thick extract of black betel leaves. Standard solution of gallic acid 200 ppm was made to determine the operating time obtained at minute 60 and the maximum wavelength of 751 nm. Then made a standard solution with a concentration of 100, 125, 150, 175, 200 ppm so as to produce a regression equation that is, $y = 0.0028x - 0.1902$ with a correlation coefficient value (r) = 0.9919. Determination of total phenol was done 3 times replication and the absorbance was seen. Through the calculation results obtained total phenol content of 39.0916 ± 0.6818 mg GAE / g extract with a coefficient of variation of 1.7441%.

Keywords: Black betel leaf, extraction, extract, phenolic content, maceration