

ABSTRACT

Helen Missy, 2019. Qualitative and Quantitative Analysis of Gofasa Leaf Extract (*Vitex cofassus*) in Various Solvents. Advisor Khadijah and Ahmad Muchsin Jayali,

This research was conducted to determine the content of secondary metabolites of gofasa leaf extract in four different solvents of polarity level, that is ethanol, ethyl acetate, chloroform, and n-hexane. The four gofasa leaf extracts were analyzed qualitatively by phytochemical tests, then analyzed quantitatively using a uv-vis spectrophotometer for the determination of total phenolic and flavonoid content. The results of the qualitative analysis showed that positive ethanol extract contained phenolic compounds, saponins, and tannins. Ethyl acetate extract contains alkaloid compounds, flavonoids, phenolics, saponins and tannins. Chloroform extract positively contains alkaloids, flavonoids, phenolics, saponins and tannins. The n-hexane extract is positive for tannins. In determining total phenolic, ethanol extract had the highest total phenolic value of 211.5675 mgGAE /g, chloroform extract had a phenolic total of 177.7837 mgGAE / g, and ethyl acetate extract with a total phenolic of 168.3243 mgGAE / g. The highest total flavonoid was found in chloroform extract with a value of 90.7993 mgQE / g. The total flavonoid ethyl acetate extract obtained was 19.3396 mgQE / g.

