ABSTRACT

This study was conducted to test the antioxidant activity of the extract of Avocado leaves (Persea americana Mill) using Nitrite Oxide, through the Ethanol extract, Acid and Dichloromethane fractions. Through laboratory testing the active compounds showed are: Alkaloids, Flavonoids, Phenolics, Tannins, Monoterpenes, Sesquiterpenes and Saponin. From 300 grams of simplicia the Ethanol yield of concentrated extract of crude drug is 6.06% or 18.20 grams. Using 1 gram of Ethanol the extract fractionation was carried out to obtain the Acid and dichloromethane fractions, the yield obtained is 60% or 0.6 gram of Acid fraction and 19% or 0.19 gram of Dichloromethane fraction. ANOVA results on Ethanol extract, Acid fraction and Dichloromethane fraction are significant with p value of 0.000 < α = 0.05. The Duncan's Multiple Range test showed that the Ethanol extract (50, 100 and 20 ppm), the Acid fraction (50, 20, 100, 500, 10, 200, and 1000 ppm), and Dichloromethane fraction (20, 50, 100, 10, and 200 ppm) are groups that contributed to the significance of the analysis on antioxidant activity. MANOVA test showed a significant antioxidant activity on the types and variations of extract/fractionation with p value of 0.000 < α = 0.05. Duncan multiple range test showed that Ethanol extract and Acid fraction contributed to the significance on the statistical analysis used.

Keywords: Avocado leaves, Antioxidant, Nitrite Oxide