ABSTRACT

DETERMINATION OF KRATOM LEAF (MITRAGYNA SPECIOSA) EXTRA ANTIOXIDE ACTIVITIES FROM INFUSA USING DPPH

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Antioxidants are compounds that can inhibit reactive oxygen species and also free radicals so that antioxidants can prevent diseases related to free radicals. This research design begins with kratom leaves which have been washed clean, dried and then ground and extracting the kratom leaves with a water solvent to concentrate and extract the extract, then the extract is made (concentrations 0.1, 0.2, 0.3, 0.4 and 0.5 ppm) the antioxidant activity was tested using a DPPH solution with a vitamin C comparison (concentrations 1, 2, 3, 4, and 5 ppm), then the absorbance was measured at a predetermined maximum wavelength. The results of the kratom leaf infusion were obtained with the dpph method it has IC50 then filtered with filter paper. then concentrated using a centrifuge to separate the remaining powder. so that it can produce a liquid extract from the infusion method. Quantitative antioxidant activity test using UV-Vis spectrophotometry at a wavelength of 515 nm with vitamin C as a comparison. With a result of 161,473 it is classified as strong.

Keywords: *Kratom Leaves, Antioxidants, DPPH*