

ABSTRACT

VALIDATION OF LINEARITY TEST METHOD FOR DETERMINATION ANTIOXIDANT ACTIVITY BY DPPH METHOD USING 96% ETHANOL SOLVENT

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Imbalance between the number of free radicals and the body's natural antioxidants. This process has the negative effect of attacking healthy cells in the body. In this process, the body needs antioxidants in large quantities. Antioxidants can inhibit oxidation by binding free radicals and highly active molecules to help inhibit cell damage. Antioxidants will stabilize free radicals that lack electrons and inhibit the formation of free radicals. This study used ascorbic acid samples dissolved in 96% ethanol. To prove the existence of antioxidant activity in kratom leaf plants, the DPPH method using UV-vis spectrophotometry is required. DPPH is a free radical that is stable at room temperature and is often used to assess the antioxidant activity of several compounds or natural extracts. This method was chosen because it is simple, easy, fast and sensitive for assessing the antioxidant activity of natural compound compounds. The test was carried out by taking 10 mg of chili sauce with a concentration of 1, 2, 3, 4, 5 ppm and then repeating it 3 times. . And the data obtained can be concluded that the absorbance results from replications 1, 2 and 3 are not much different. The greater the concentration, the smaller the resulting absorbance. The % attenuation results from this research can be said to be valid because the r value obtained is close to 1, namely replication 1= 0.9932, replication 2= 0.9946, replication 3= 0.9910.

Key word: antioxidan, ascorbic acid, DPPH.