ABSTRACT

DETERMINATION OF THE PROCENTAGE OF REDUCETING THE ANTIOXIDANT ACTIVITY OF ROSEMARY LEAVES (*Rosmarinus officinalis* L.) AND STEVIA (*Stevia rebaudiana*) LEAVES COMPARISON (75 : 25) WITH DIFFERENCES IN TIME VARIATION

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Rosemary leaves (Rosmarinus officinalis L.) is a source of natural antioxidants with many benefits. Stevia leaves (Stevia rebaudiana) have low calorie content and have health benefits such as antioxidants, antifungal and non-carcinogenic. Test methods that can be used to test the activity and capacity of antioxidant compounds to counteract free radicals include the 2,2-diphenyl-1-picrylhydrazyl (DPPH) method. The results of this study were the weighing of 3 (three) samples with 3x replication for rosemary leaves and stevia leaves, each weighing 1.5 grams and 0.5 grams. The DPPH weight used for the blank solution obtained a result of 0.004 grams and for a standard vitamin C solution obtained a result of 0.005 grams, 3 (three) samples which were brewed for 5, 10 and 15 minutes produced the same aroma, maximum DPPH wavelength using uv-vis spectrophotometry namely 522.0 nm with an absorbance of 0.689 A, the calculation of the IC50 value used a linear regression equation and obtained the IC50 value of a standard vitamin C solution of 6.74 ppm, a significance result of 0.520 indicating that there was no significant difference, so a follow-up test was carried out in the form of the games howell, from the test it was found that the groups showing an average difference in absorbance were the Sample 1 and Sample 2 groups, the percentage (%) absorption of vitamin C was greater than the rosemary leaf and stevia leaf tea samples with concentration values that were The same. When compared with the absorption percentage in samples 1, 2 and 3 with the absorption percentage of vitamin C solution, the percentage of absorption of vitamin C was still higher. The conclusion of this study was rosemary and stevia brewed tea brewed with variations of 5, 10 and 15 minutes with a ratio of 75: 25 there is a difference in the percentage (%) of damping, namely for 5 minutes it is 55.39%, 10 minutes it is 75.37% and for 15 minutes it is 73.15%. The suggestion from this study is that further research is needed regarding the antioxidant content of rosemary leaves and stevia leaves if the antioxidant content tests are carried out separately whether the antioxidant content is still high.

Keywords : Rosemary, Brewed Tea, Antioxidant