ANTIOXIDATION ACTIVITY AND CHEMICAL PROPERTIES OF AVOCADO JUICE WITH VARIATION OF ADDITION ALOE VERA GEL (*Aloe vera var. Chinensis*)

ABSTRACT

Avocado is a type of fruit favored by many people because, in addition to its delicious taste, it is also rich in antioxidant. The high fat in avocado results in a large oxidation potential to produce free radicals, so it requires flavonoid compounds such as kaempferol, quercetin, and myricetin as much 257.7, 94.8, and 1283.5 mg/kg respectively. These compounds are included in the group of polyphenols which are believed to be antioxidative. The presence of a flavonoid in aloe gel can serve as a source of antioxidants. Efforts to increase oxidation activity, it is necessary to do research on the process of making avocado juice with the addition of aloe vera gel, in this case, to find a high level of antioxidant. Therefore, this study will examine the antioxidant activity of avocado juice. This study aims to produce avocado juice by adding aloe vera gel with high antioxidant activity and evaluating the effect of adding aloe vera juice on avocado juice to antioxidant activity, phenol, acid number, peroxide number, and moisture content.

This study used a 2-factor complete randomized design (RAL) with 2 replication, namely aloe vera (5%, 15%, 25%) and water (1:1.5 and 1:5). Data and analysis Variety of ANOVA (Analysis of Variance) and treatment that gives significantly different values are tested further by the Least Significant Range (SPSS).

The results obtained in this study were the highest antioxidant activity of 7.61 (％RSA), the water content of 98.13 (％wb), acid number 0.99, peroxide number 6.37, and phenol having ppm levels of 11.67.

Keywords: Juice, avocado, aloe vera water