

ABSTRACT

TEST OF TOTAL PHENOL CONTENT OF BEVERAGES CONTAINING TELANG FLOWERS (*Clitoria ternatea* L.) WITH THE ADDITION OF 5% JUICE OF BILIMBI (*Averrhoa bilimbi* L.)

LUTFIA NAURIN QOLBY

Indonesia is a country that has a variety of biodiversity, where there are several plants that can be used as traditional medicine to prevent and treat various types of diseases. The habit of people drinking water from boiled plants from the roots to the flowers has become a very common thing for health reasons. What is the total phenol content of a drink containing telang flower (*Clitoria ternatea* L.) with the addition of 5% bilimbi juice (*Averrhoa Bilimbi*). The aim of this research is to determine the total phenol content of drinks containing telang flowers (*Clitoria ternatea* L) with the addition of 5% bilimbi juice (*Averrhoa bilimbi* L). This research uses an experimental type of research, which aims to determine the total phenol content of drinks containing flowers. telang with the addition of 5% bilimbi juice. From this research, the results of the telang flower phenol content were 0.0629 ± 0.0008 mgGAE/g sample with a correlation variation of 1.27%; bilimbi was $0,0739 \pm 0.0008$ mg GAE/g sample with a correlation variation of 1.08%; The combination drink of telang flower with the addition of 5% bilimbi juice was 0.0329 ± 0.0006 mg GAE/g sample with a correlation variation of 1.82%. of the three samples, the highest is sample B because bilimbi has a sour taste, which means the more acidic the solution, the higher the absorbance, while sample C is lower compared to the other samples. This is possibly caused by the instability of the anthocyanin levels in telang flowers and vitamin C in bilimbi due to the degradation process during the storage process. This is due to the nature of anthocyanins which are very easily degraded by temperature, pH and storage and the nature of vitamin C in bilimbi also has properties which are easily degraded by temperature and storage. Based on research that has been carried out, the average phenolic content of the combination drink of telang flowers with the addition of 5% bilimbi juice is 0.0329 ± 0.0006 mg GAE / gram of sample.

Keywords: Telang flower, Bilimbi, Total phenols, UV-Vis Spectrophotometry