

ABSTRACT

TEST OF TOTAL FENOL CONTENT OF BUTTERFLY PEA FLOWER (*Clitoria ternatea* L.) DRINK WITH 10% ADDITION OF BILIMBI JUICE (*Averrhoa bilimbi* L.)

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Indonesia is a country rich in biodiversity. Various species from various plant families are found spreading in the territory of Indonesia, for example butterfly pea flower (*Clitoria ternatea* L.) and bilimbi (*Averrhoa bilimbi* L.). This study aims to determine what is the total phenol content in butterfly pea drink with the addition of 10% star fruit juice determined using spectrophotometry. This research was conducted using the true experimental method which aims to determine the total phenol content in butterfly pea drink with the addition of 10% bilimbi juice using a UV-Vis spectrophotometer. Using 100 ppm gallic acid solution was made to determine the operating time obtained at 80 minutes and the maximum wavelength of 744 nm. Then made a standard solution concentration of 20, 40, 60, 80, 100 ppm so as to produce a regression equation that is $y = 0.0038x + 0.1961$ with a correlation coefficient value (r) = 0.9735. Determination of total phenol was carried out 3 times replication by obtaining the results of the calculation butterfly pea drink with the addition of 10% bilimbi juice of 0.0323 ± 0.0003 mg GAE / extract with a coefficient of variation of 0.93% shows good precision because it meets the parameters.

Keywords : Butterfly pea flower, bilimbi juice, phenolic content.