ABSTRACT

ANTACID AND ANTIFLATULENT *IN VITRO* ACTIVITIES OF 70% ETHANOLIC EXTRACT SYRUP OF HOLY BASIL SEED (*Ocimum sanctum*)

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This study aims to prove the acid neutralization and antiflatulent activities of 70% ethanolic extract of Holy Basil seed (*Ocimum sanctum*) which formulated in syrup dosage form. Antacid activity preparations were used *in vitro* artificial gastric model based on Wu *et al.* method, and antiflatulent (foam removal test) activity used 500 ml beaker glass based on Rezak modification method.

The results of antacid activity group test of 70% ethanolic extract syrup of Holy Basil seed at 0.1%, 0.15%, and 0.2% were found to possess acid neutralization with average duration of 97.57 ± 8.23 minutes, 138.72 ± 7.51 minutes, and 65.63 ± 15.95 minutes, respectively. The results of antiflatulent activity group test showed defoaming activity with the rest of the foam level of 1.4 ± 0.1 cm, 1.0 ± 0.1 cm, and 0.5 ± 0.1 cm, respectively. All of the results were statistically analyzed by using one way anova and Post Hoc Test with Least Significance Difference (LSD) method. The p values of all concentrations of antacid and antiflatulent activities were below 0.05, which shows a significant difference compared to the negative control (syrup without extract).

It is concluded that 70% ethanolic extract syrup of Holy Basil seed had antacid and antiflatulent activities.

Keywords: *Ocimum sanctum*, antacid, antiflatulent