ABSTRACT

Every year Indonesia produces 34.5 tons of waste and 12 percent of this waste is paper. Meanwhile, as much as 43 percent of paper waste is still not managed. The total need for paper for the 2018-2019 school year reached 88,215.09 tons. This study aims to process paper waste into products that have added value. One of them is by making paper soap with the scent of Seulanga flowers, because paper soap is relatively practical to use. The Seulanga flower was chosen because the Seulanga flower is one of the flowers that has become the identity of Aceh. This research began with the manufacture of recycled paper, then continued with the manufacture of liquid soap. There are 4 liquid hand washing soap formulas that will be tested with different extract contents, Control (0%), F1 (0.5%), F2 (5%), F3 (10%). The tests to be carried out are saponin test, pH test, free fatty acid/alkali free test, aroma preference survey and practicality. The scent preference survey was conducted by collecting data on the comparison of respondents' preferences for the three scents of recycled paper soap formulas. This aroma preference survey aims to choose which formula is most preferred by respondents as the basis for selecting the formulation to be applied to recycled paper. Meanwhile, the practicality preference survey was conducted by collecting respondents' opinions to assess the practicality of recycled paper soap compared to liquid form of hand washing soap.

The results obtained from the saponin test were Seulanga flowers containing saponins. The results obtained from the pH test were that the four tested formulas met the quality requirements for liquid hand washing soap (SNI 2588: 2017). The results obtained from the free fatty acid/free alkaline test were that the four formulas had to be titrated with a KOH solution because the four formulas were acidic, the results shown after titration were that the free fatty acid values of the four formulas did not meet the quality requirements for liquid hand washing soap (SNI 2588: 2017). The results of the aroma preference survey, the most preferred aroma of F3 formulations than F1 and F2, while from the results of the practicality survey, the majority of respondents considered that recycled paper soap was more practical to use than solid soap or liquid soap, both in terms of storage and use.

Keywords: Paper Soap, Seulanga Flowers, Paper Waste