

Training on Making Soap from Kitchen Herbs in Bancaran Village, Bangkalan Regency

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ARTICLE INFO

Keywords: Borax, Qualitative Test, Soap, Herbal Ingredients, Saponification

Received : 19, June

Revised : 21, July

Accepted: 26, August

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ABSTRACT

Indonesia is one of the countries with the largest tropical rainforest in the world. This situation causes Indonesia to have the potential to become a country producing herbal ingredients, or spices, which we often encounter in the kitchen. Herbal ingredients are from nature and have many benefits, especially for health. Aside from being consumed, herbs can also be added to products used by the external body, such as herbal soaps. Herbal ingredients in soap can brighten, moisturize, and solve skin problems. The purpose of this community service is to train the community in Bancaran Village regarding making soap from herbal ingredients that are easy to find in the kitchen using simple tools. The methods used are the lecture method and demonstration simulation. The results of the community service show that the people in Bancaran village are very enthusiastic about this training, and the community can make handmade herbal soaps with attractive packaging and then market them.

INTRODUCTION

Herbal ingredients are currently in great demand by the public. The existence of the "Back to Nature" trend, especially in Indonesia, has made people increasingly prefer all kinds of products derived from natural or herbal ingredients. Herbal plants are containing vitamins, minerals, and other substances that are good for health. Several examples of herbal ingredients that we can find in the kitchen are turmeric, nutmeg, coriander, and black cumin. As one of the spice plants, turmeric has anti-bacterial benefits, both Gram-positive and Gram-negative bacteria (Syukur, 2002). This herbal ingredient can be one of the ingredients in making soap, so we can enjoy the benefits of these herbal ingredients based on the soap we use every day when bathing.

Based on SNI 06-3532-1994, soap is defined as a cleaning preparation consisting of an alkaline compound, namely a sodium or potassium compound with a fatty acid that can be derived from vegetable oil and or animal fat. The fatty acids contain in this triglyceride react with a NaOH base to produce salt and glycerin. The process of forming soap is called a saponification or saponification reaction (Ogunsuyi & Akinnawo, 2012). The saponification reaction is show in Figure 1.

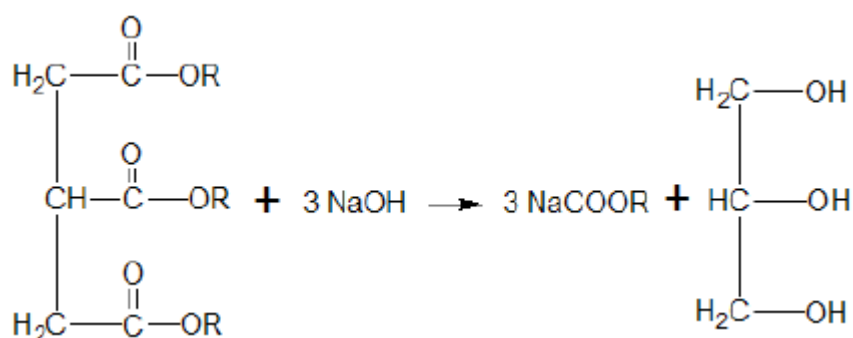


Figure 1. Saponification reaction in soap (Arbelaez, 2007)

The main ingredients of soap are fatty acids and alkalis or bases. NaOH as an alkaline serves as a neutralizer for fatty acids. Then Aquadest is used as an alkaline solvent because it is safer, inert, cheaper, and easy to obtain (Tranggono, 2007). In addition, the addition of glycerin in soap making as a humectant. This humectant is useful for preventing the drying of preparations and as a lubricant in preparations (Sulaiman, 2008).

Herbal soap has enormous potential if managed into an independent business or homemade. Recently, many people are getting interested in using natural ingredients, which don't have the bad effects of synthetic chemicals. So this herbal soap-making training was carried out to provide knowledge and new jobs for house wives in Bancaran village.

IMPLEMENTATION AND METHODS

Community Service is carried out in Kencat Village, Bancaran Village. This service begins on March 9th 2023 and ends in July 2023. This activity

involves lecturers as resource persons, students as assistants, and 25 people from the village of Threads. The project timeline are show in Table 1.

Table 1. Stages of Implementation of Activities for the Community in Bancaran Village

No	Time line	Details of activities
1	March 2023	Outreach, resource persons presenting the benefits of herbal soap and opportunities as a handmade herbal soap business
2	March 2023	Demonstration, resource person conducts a demonstration of making herbal soap using ingredients available in the kitchen
3	March-May 2023	Assistance, resource persons provide assistance to the community or participants in making herbal soap
4	June-July 2023	Education, resource persons teach how to make packaging for soap products, and marketing them.
5	July 2023	Closing

The tools used in making herbal soap are hand blenders, mats or measuring cups, containers for weighing, digital scales, spatulas and spoons, whisks, mica, PVC pipes, universal indicators, wipes, and tissues. The materials used are aquadest, coconut oil, canola oil, glycerin, aquadest, herbal ingredients (nutmeg, turmeric, coriander, black cumin), NaOH, and fragrances.

RESULTS AND DISCUSSION

This Community Service activity was attended by the community in Bancaran Village. Participants consisted of teenagers and adult women but were dominated by housewife.

This community service activity was carried out for 6 months that began with the socialization of the benefits of herbal soap and its opportunities as a handmade business. This is done to attract people, especially housewife who don't work, to make their own money by starting a herbal soap business.

The Bancaran village community was enthusiastic and continued with the next meeting to practice making herbal soap on a small scale. The ingredients used in practice to make this herbal soap are kitchen ingredients that are easily found by the community, namely nutmeg, black cumin, turmeric, and coriander. In the next activity, the community or participants started to produce herbal soap accompanied by resource persons and students. Producing Herbal soap can use kitchen ingredients, such as nutmeg, black cumin, turmeric, and coriander has many benefits for the skin. Nutmeg can brighten the skin and moisturize the skin. Black cumin can be anti aging of the skin and repair damaged skin cells. Turmeric can heal

wounds, brighten the skin, treat acne and skin problems. Coriander can protect the skin from acne, pigmentation of the skin, and dryness.

The oils used as the main ingredients of this soap are coconut oil and canola oil. Coconut oil contains lauric acid that functions as a skin softener and moisturizer. Meanwhile, Canola oil contains vitamin E as an antioxidant that can protect the skin from free radicals. In addition, in the process of making soap, glycerin is added to produce soap that can moisturize the skin, brighten the skin, and prevent premature aging. The fragrance used is fragrance with melon aroma.

The thing that needs to be considered in the process of making soap is how to mix NaOH and aqua dest, where the aquadest is placed in the container first, then NaOH is added to it. Do not turn upside down in doing so, as this may cause light sparks or heat. After that it is mixed with the oil used and other additional ingredients are added.

Test Evaluation of soap before packaging is carried out by organoleptic test of soap, then test the degree of acidity (pH) of soap (qisti, 2009). Where soap that is safe to use for body skin ranges from 8-10. If the pH is still high, then it needs to wait longer for the curing period. The results of the Evaluation of Solid Herbal Soap Preparations are shown in Table 2, where all soap in week 2 had a pH between 8-9 which indicated that the curing period was over, and the soap was ready to be packaged.

Table 2. Results of Evaluation of Solid Herbal Soap Preparations

Parameters	Herbal Ingredients			
	Nutmeg	Coriander	Black Cumin	Turmeric
Form	Solid	Solid	Solid	Solid
Color	Brown	Brown	Brown	Dark yellow
smell	strong scent	Less scent	strong scent	strong scent
pH week-2	9	9	9	8,5

In the next stage of the activity, the resource person prohibited the packaging of attractive and selling soap and then planned the marketing process for the handmade herbal soap. Activity documentation is shown in Figure 2.



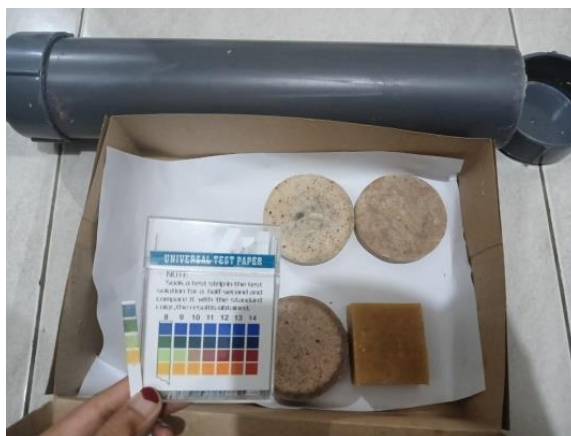


Figure 2. Making Herbal Soap in Bancaran Village

This activity ended with a closing in July 2023, where resource persons, students, and participants evaluated what they had been doing for the past 6 months. And provide solutions to the difficulties or obstacles faced by participants in the process of making soap to market it. The executor of this community service hopes that the Bancaran village community can continue marketing it outside the city and even outside the country

CONCLUSIONS AND RECOMMENDATIONS

The Herbal Soap Making Training in Kencat Village, Bancaran Village, Bangkalan Regency received great enthusiasm from the community. After this activity, the community knows how to produce herbal soap using ingredients available in the kitchen so they can market it. The executor of this community service hopes that the community, especially house wives in Bancaran Village, can have their own business and expand their soap marketing outside the city or even abroad.

ACKNOWLEDGMENT

Thanks to all those who contributed to this Community service, Akademi Farmasi Yannas Husada Bangkalan and STIE Mahardhika Surabaya.

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