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The Potential of Mango Lipstick Leaves as Natural Bar Soap Extract: The Latest Innovation of Environmentally Friendly Products

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Abstract : The Potential of Mango Gincu Leaves as Natural Bar Soap Extract: The Latest Innovation of Environmentally Friendly Products. Soap is an item used in everyday human life that is useful for cleaning the body from microbes and germs. Mango leaves have natural ingredients that have antimicrobial and antioxidant properties so that they can be used as ingredients in making environmentally friendly soap. Making soap from mango leaf extract aims to bring out the potential of mango leaves as an effective soap preparation as a cleanser and maintain body hygiene. This method of community service activities uses socialization lectures and demonstrations of the stages of making bar soap from Gedong Gincu Mango leaf extract. The primary data in this study was obtained from the results of socialization and demonstrations in the field. Literature review of previous research, used as a secondary data source. The results of community service activities obtained increased insight and practice of making bar soap from mango leaf extract and increased awareness of the importance of maintaining hygiene and sanitation. The impact received by the community is in the form of increasing the spirit of innovation and creativity in developing village potential.

Keywords: Mango Lipstick Leaf Extract, Soap, Innovation, Eco-friendly.

INTRODUCTION

Karangwuni Village, Sedong District, is one of the villages that has village potential in the form of planting mango trees, especially Gedong Gincu. So far, mango trees are usually only eaten or mandated to have their flesh or replanted their fruit seeds for cultivation. But actually Gedong Gincu Mango leaves can be used through processing with stages to make bar soap; For this reason, socialization and education lectures are needed as well as demonstrations or demonstrations of the process of making bar soap made from mango leaves.

This community service activity explains and elaborates on the process of making soap from mango leaf extract and explains the benefits that can be obtained from the use of this soap. In addition, the article will also discuss the positive impact produced by this product in maintaining body and environmental hygiene. The purpose of this community service activity is to find out the uses and benefits of natural soap from mango leaves as a new environmentally friendly innovation product making its existence very important for the community. This is an effort to support the potential and increase public awareness in utilizing the existing potential into new innovation products, we think the procurement of counseling activities on soap making needs to be done because in addition to educating the community, this activity in the future if it can continue and can be developed, of course, can be an added value and can advance the local economy of Karangwuni Village.

LITERATURE REVIEW

Cleanliness base Health. Hygiene includes the cleanliness of the house, environment, clothing, food and our bodies. Body hygiene is maintained by bathing twice a day. Dust, dirt, fat attached to our bodies when bathing will be more easily lost if we use soap. Soap serves to cleanse the body of microbes and germs by lowering surface tension. Soap is important as a non-food product to maintain health and to cleanse yourself. Soap is also very useful as a preventive measure and curative action against skin diseases caused by fungi or bacteria. Types of soap based on their physical form consist of liquid soap and solid soap. Lately, liquid soap is more in demand by the public because it has the advantages of being more hygienic, easy to use and storage for consumers (Widyasanti, et al., 2019). Bath soap can be enriched with antibiotics so that it functions as an antibacterial is in great demand by the public. Antibacterial soap is believed in addition to cleaning the skin, it can also prevent and treat bacterial diseases (Sukawaty, et al., 2016). Soap is made from fatty acids and alkalis. The manufacturing process is by mixing the fatty acids present in the oil with a solution of alkaline salts or strong bases. Then added other ingredients according to the purpose and specificity of the soap produced such as fragrance and antiseptic. This process is known as the saponification reaction, which is a hoarding process that reacts a fat or glyceride with a base (Widyasanti, et al., 2019).

Mango is a fruit that is very tasty and familiar to the community. The use of mangoes besides being buag can also be one of the innovations in soap making. Mango leaf extract as an additional ingredient in soap making. Mango plant (*Mangifera indica L.*) is a plant that has potential as a natural soap ingredient because it contains secondary metabolite compounds. Previous studies have proven that mango leaves can function as antioxidants, antimicrobials, and antitumors. Chemical tests of mango plant flavonoids also contain saponins, gallic tannins, cathetic tannins, quinones and steroids or tripenoids (Ningsih, 2017). From the preliminary research, it is proven that mango leaves have natural ingredients that have antimicrobial and antioxidant properties. On this basis, mango leaves have added value, are made an attractive choice that is useful in making environmentally friendly soap

and becomes an interesting innovation. The potential of mango leaves as a soap extract is the result of researchers exploring the latest innovations in the production of environmentally friendly soap.

METHOD

This community service activity explains about making natural soap from mango leaf extract in an easy and environmentally friendly way and has a high level of innovation. Through lectures, socializations and demonstrations to the audience, namely PKK cadres about making natural soap from mango leaf extract using household ingredients that are easily obtained and about how the process of making natural soap from mango leaf extract. Regarding the potential of villages with many mango plants, the raw material, namely mango leaves, is relatively easy to obtain, it is hoped that this product will be redeveloped by PKK cadres because this product is an innovation that arises from the potential of the village. The feedback process is carried out after PKK cadres answer the questions and interactions given so that they can find out the understanding of the lecture process as well as socialization and demonstration of making the products made; acceptable to PKK cadres.

RESULTS AND DISCUSSION

This community service activity was carried out by socializing how to make soap from mango leaves and the benefits of mango leaf soap for the skin, this activity was carried out on Monday, August 28, 2023. The program carried out is several stages, the first is the general introduction stage related to soap products and their benefits, then there is a discussion stage related to innovations in soap products, the innovation is using mango leaf extract which is an ingredient in soap made. This community service activity went according to plan and went well with the presence of PKK cadres in Karangwuni Village. Based on the results of interactions carried out, PKK cadres felt that making soap from mango leaf extract was easy to do because the ingredients needed were easy to find. This activity also received appreciation from PKK cadres considering the potential of the village and product innovation has emerged from this activity. PKK cadres also hope to develop this soap product as a typical village product because in addition to various benefits, this soap product is also an environmentally friendly product because it uses natural ingredients.

Trustorini Handayani and Yusuf Tanjung (2017:31). Innovation is the ability to apply creativity to solve problems and explore opportunities in order to improve and enrich human life. Innovation is needed so that human life becomes more comfortable and more prosperous. While Product Innovation is a synthesis in creating something new, it is expected to provide added value in improving product quality to meet consumer expectations. The innovation of soap products from lipstick mango leaf extract is expected to continue to be developed by the village community so that it is not only a product of a work program but becomes a superior village product that can be an added value and promote the local economy in Karangwuni Village. The disadvantage of this activity is the manufacturing process that cannot be done directly due to limited socialization time. However, even though it cannot be done directly, this activity still provides education and information to the audience.

Table 1. Soap composition

Composition
Mineral water
Caustic Soda
Olive oil
Coconut oil
Palm oil
Fragrance oil
Mango lipstick leaf extract

Table 2. How to Make Soap

How to Make Mango Leaf Extract Soap
Mix sodium hydroxide (NaOH) with water in a heatproof container. Stir gently until well mixed. Be sure to use rubber gloves, protective goggles, and a mask when doing this step because NaOH can cause irritation to the skin and damage the respiratory system
Combine coconut oil, olive oil, and palm oil in a container then mix well and let stand After that, pour the sodium hydroxide (NaOH) mixture into the oil slowly while continuing to stir using a hand mixer Make sure to keep using protection such as rubber gloves, protective goggles, and masks.
Continue stirring the mixture slowly until it reaches a homogeneous mixing level.
Add the essential oil and stir until well mixed.
Pour the soap mixture into the soap mold. Let the soap harden for a few days.
Once the soap has hardened completely, remove it from the mold and leave it for a few weeks to dry and allow time for the perfect hardening process
Once cooked, the bar soap is ready for use. Store in an airtight container to maintain the quality and durability of the soap.

Table 3. Result

Initial state	Treatment	Final state
PKK cadres who initially did not know and understand the process of making soap and the benefits of soap from manga leaf extract	Explanation of what ingredients are used then how to make natural soap from mango leaf extract, along with its benefits	PKK cadres can know and understand the function of each ingredient used in making soap from mango leaf extract and know its benefits



Figure 1. Socialization and demonstration activities



Figure 2. Sample of Mango Gedong Gincu Leaf Extract Bar Soap

CONCLUSION

Based on the results of observations of community service activities that have been carried out; The attention or attention of PKK cadres to the delivery process related to how to make soap products from mango extract and its benefits turned out to be quite high, this can be seen from the many interactions and questions about how to make it. The question is not only about how to make soap but related to what kind of mango leaves can be used for soap making. The emergence of new innovations from materials that are considered waste, namely Gedong Gincu Mango leaves to be extracted from extract; PKK cadres began to realize that there was potential owned by the village and it turned out that the material considered waste could have added value and become an environmentally friendly product and if it continued to be developed would become the village's flagship product which hopefully could help improve the local economy.

Acknowledgement:

Contains gratitude to the 2023 KKM Committee, LPPM UMC, members of Group 38 KKM 2023 and residents and officials of Karangwuni Village, Sedong District who have supported this publication.

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