Diversification of processed miana leaves for community empowerment in Sokkolia Village, Gowa Regency

A. Irma Suryani a,1,* , Andi Asmawati Azis a,2 , A. Bida Purnamasari b,3 , Hilda Karim a,4 , Irma Suryani Idris a,5 , Ahmad Fudhail Majid c,6

a Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Negeri Makassar, Jl. A. P. Pettarani, Makassar, South Sulawesi, Indonesia
b STKIP Pembangunan Indonesia, Jl. Inspeksi Kanal, Makassar, South Sulawesi, 90233, Indonesia
c Department of Chemistry, Faculty of Mathematics and Natural Sciences, Universitas Negeri Makassar, Jl. A. P. Pettarani, Makassar, South Sulawesi, Indonesia
1 a.irma.suryani@umn.ac.id; 2 asma.azis@gmail.com; 3 bidapurnamasari@gmail.com; 4 hilda.karim@umn.ac.id; 5 irmaaries@yahoo.com; 6 bionature@umn.ac.id
* Corresponding author

ABSTRACT

A healthy lifestyle is an effort made to keep the body healthy and fit. One of the healthy lifestyles is consuming vegetables and fruit. In accordance with one of the goals of sustainable development (SDGs), namely a healthy and prosperous life and economic growth, the focus of this activity is on the health and welfare of the community by utilizing the processing of minasa leaves through diversification of miana leaves into various food preparations. This training was held in Sokkolia Village, Gowa Regency. Residents were given hands-on material and practice regarding miana leaf processing. After the training, a questionnaire was given to determine the participant’s response to this training. The results of the questionnaire obtained an average score of 4.22. This means that the implementation of activities is in good criteria.

INTRODUCTION

Sustainable Development Goals (SDGs) are global and national commitments in an effort to improve the welfare of society which includes 17 goals. One of the SDGs goals that will be the main focus in this activity is a healthy and prosperous life and economic growth (Ruslan, 2021). A healthy lifestyle can be applied by eating a nutritionally balanced diet. A nutritionally balanced diet can be obtained from food sources that contain carbohydrates, protein, fat, vitamins and minerals. The results of Riskesdas 2010-2013 show that nationally the behavior of the population aged >10 years who

consumes less vegetables and fruit is still above 90%. This condition is in line with the findings of the results of the Individual Food Consumption Survey (SKMI) in the 2014 Total Diet Study (SDT) that the population’s consumption of vegetables and their processed products as well as fruits and their processed products is still low. As a result, inadequate consumption of vegetables and fruit affects the supply of vitamins, minerals and fiber that are needed by the body (Hermina & Prihatini, 2016). One of the most common plants found in South Sulawesi, especially in Sokkolia Village, Bontomaranu District, Gowa Regency is miana leaf, but not many people consume this miana leaf because the lack of public knowledge related to the benefits of miana. This causes people to be less interested in processing miana as a processed food that is more creative and innovative.

Miana leaves (Coleus scutellarioides L (Benth) contains anthocyanin compounds that can be used as natural dyes and antioxidants (Yanto et al., 2020). Utilization of miana leaves as a source of anthocyanins can be used as natural pigments for various coloring purposes, especially in the food industry (Puspita, Tjahyono, Samalukang, & Im, 2018). Also, collection of anthocyanins in miana leaves can be done at any time and does not depend on the season due to its availability which is always abundant in nature (Puspita, Tjahyono, Samalukang, Im Toy, et al., 2018). Miana is one of the plants included in the list of 66 biopharmaceutical plant commodities based on the decree of the Minister of Agriculture (Tangkeallo & Widyaningsih, 2014).

Miana leaves also contain secondary metabolites of flavonoids, steroids, tannins and saponins and have anthelmintic activity (Ridwan et al., 2006). The antioxidant content of miana leaves is also quite high, which is 84.64% (Yuniar, 2013). Research on the results of antioxidant activity tests on isolates using the DPPH (Diphenyl pikiirydrazyl) also obtained antioxidant activity value of 98.53 mg AEAC/g (Podungge et al., 2017). Apart from being an ornamental plant, here are some diseases that are often treated with miana and lime leaves including shortness of breath, cough, and muscle pain, even diseases such as tuberculosis have also been treated based on the results of an inventory of medicinal plants in Gowa Regency (Murniati et al., 2019).

With regard to the nutritional content of various miana leaves, so that the efficacy and content of miana leaves can be utilized, the solution is to process miana leaves into food that is easy to consume and is liked by the community, it is necessary to have processed food innovations that can attract public interest by processing them into tea bags, or with miana crackers. It is hoped that the knowledge and skills provided during the training to residents can improve the living standards of the surrounding community for a healthy and prosperous life which is also in accordance with one of the goals of the SDGs.

One of the partner villages in this research is Sokkolia village, located in Gowa Regency. This village has many miana leaves scattered in several places, but due to limited information, many people still find it difficult to process Miana leaves into more varied foods. Generally, people only make this miana leaf as an ornamental plant in the yard. Based on this, this training was carried out to provide information and skills in processing miana leaves into innovative and economically valuable food preparations for the people of Sokkolia village, Gowa Regency.

METHOD

The implementation of this community service activity was carried out in collaboration with community groups in Gowa Regency which are expected to be able to follow up on disseminating miana leaf diversification processing skills. This training was carried out by presenting materials that were supported by practices regarding miana leaf diversification, namely: Information about the content and benefits of miana leaves as a healthy and balanced nutritional food; Information about various processed miana leaves as an effort to improve the community’s economy; The technique of processing various miana leaves, which includes information and hands-on practice regarding the processing of various miana leaves that are tailored to the nutritional needs and tastes of partners. Through this training, partners will learn the techniques of making various processed miana leaves as innovative and nutritionally balanced foods and varying food security according to the type of product produced so as to open up entrepreneurial opportunities.

Stages of Implementation (Training/Production Stage)

1. Miana Cracker

The ingredients used in making miana crackers are 250 grams of rice flour, 1 chicken egg, 200 grams of miana leaves, 3 grains of garlic, salt, coriander, and seasoning flour. The process of making miana crackers, namely: Puree the garlic, coriander, salt and miana; mix rice flour, spices, eggs and remaining miana leaves, mix evenly in a bowl; take a piece of banana leaf and pour the mixture, then wrap the dough in the shape of a rice cake and steam for 25 minutes; Thinly slice the dough that has solidified and then fry it on a hot skillet.

2. Miana Tea

The ingredients used in making miana leaf tea are miana. The process of making tea from miana leaves, namely: Soak Miana leaves in clean water to clean the dirt that sticks; Clean the miana leaves, then dry; Place it on a tray, then place it in the open air; When the Miana leaves are completely dry, mash or blend until they become a fine powder; If you want to
make tea, take 1 or 2 tablespoons of powdered Miana leaves. After that brew with hot water. Add honey if you want a sweeter taste.

**Stages of Marketing**

1. **Segmenting**
   
   Segmentation for diversification of processed miana leaf products is very suitable for ages 10 to 60 years, women and men can consume this product. Starting from Rp. 100,000/month, you can buy various processed miana leaf products. These products are available in both urban and rural areas. Psychographically, the target audience is the general public with a healthy lifestyle.

2. **Targeting**
   
   The target market for food and beverages processed from miana leaves is the general public with a target age of 10-60 years. Because this product is a product that is healthy and safe for consumption because it is made from organic ingredients.

3. **Positioning market**
   
   Miana leaf processed products have nutritional value and economic value which are certainly very good for consumption. These foods are highly nutritious because they contain many micro and macro nutrients that are needed by the body.

**RESULTS AND DISCUSSION**

These activities carried out in collaboration with community groups in Gowa Regency have been going well and smoothly. This can be seen from the very high enthusiasm of the participants who took part in the training activities. This indicates that the community positively welcomes the activities that have been carried out. This training is carried out by presenting materials that are supported by practices regarding miana leaf diversification, namely Information on the content and benefits of miana leaves as a healthy and balanced nutritional food; Information about various processed miana leaves as an effort to improve the community’s economy; The technique of processing various miana leaves, which includes information and hands-on practice regarding the processing of various miana leaves that are tailored to the nutritional needs and tastes of partners. The results of the training with community groups are that they already know and are skilled in processing miana leaves into miana crackers, and miana tea.

Miana leaves contain phenolic compounds which have anthelmintic activity to inhibit the growth and development of worms. Like the research conducted by Rahmawati et al., by processing miana into leaf tea bags and as a result, the best drying time for drying miana leaves is about 30 minutes using the oven so that the content can still be utilized by the body when consumed (Rahmawati et al., 2017). In addition to the high antioxidant content and antihelmintic content, miana leaves were also found to be able to reduce blood glucose levels using experimental mice using ethanol extract of miana leaves (Illyyani et al., 2015).

In addition, the public is also taught about product marketing, namely the stages of segmenting, targeting and positioning the market, as well as the marketing mix, which is included in the marketing mix, namely product packaging, pricing, marketing locations, product marketing targets and how to promote the products offered. The training participants asked a lot of questions regarding the methods and materials prepared during the demonstration and practice, as well as how to package products.

The materials presented in community service activities by the service team are as follows; (a) Making Miana crackers; (b) Making Miana tea; (c) Marketing Stages: Segmenting, Targeting & Market Positioning (STPM); (d) Marketing Mix; and (e) Questions and answers and discussions. After giving the material and direct practice of processing miana leaves into various food preparations (Figure 1), a questionnaire was distributed to find out the responses of the participants in the PKM activity. The results of the participant questionnaire analysis are analyzed and presented in Table 1.
**Table 1.** The results of the analysis of the assessment of the implementation of PKM activities by participants

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Material presented in PKM</td>
<td>4.33</td>
<td>Very Good</td>
</tr>
<tr>
<td>2.</td>
<td>Community response to the material presented</td>
<td>4.13</td>
<td>Good</td>
</tr>
<tr>
<td>3.</td>
<td>The relationship of the material presented to the needs of the community</td>
<td>4.33</td>
<td>Very Good</td>
</tr>
<tr>
<td>4.</td>
<td>The relationship between the material and applications that can be absorbed in the community</td>
<td>4.07</td>
<td>Good</td>
</tr>
<tr>
<td>5.</td>
<td>Linkage of the material to the needs of the presenter and presentation techniques</td>
<td>4.47</td>
<td>Very Good</td>
</tr>
<tr>
<td>6.</td>
<td>Time used in giving the material</td>
<td>4.20</td>
<td>Good</td>
</tr>
<tr>
<td>7.</td>
<td>Clarity of the material</td>
<td>4.33</td>
<td>Very Good</td>
</tr>
<tr>
<td>8.</td>
<td>Community interest in activities</td>
<td>4.13</td>
<td>Good</td>
</tr>
<tr>
<td>9.</td>
<td>Satisfaction of activities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the assessment of PKM implementation activities show an average score of 4.22 this means that the implementation activities are in good criteria. Both in terms of the material presented by the presenters/resources, the community's response to the material presented, the relationship between the material and applications that can be absorbed by the community, the relationship of the material presented to the needs of the community, as well as the public's interest in the activity getting a very good response. Sokkolia residents are very enthusiastic about the training activities on plant processing to be used as food ingredients, such as processing Moringa leaves into various processed feeds. Residents are very enthusiastic and hope that activities like this can continue in the following years (Azis et al., 2021).

**CONCLUSION**

The ability of the people of Sokkolia Village, Gowa Regency to process miana leaves into miana crackers and miana tea products as well as the packaging and marketing process of these processed products has increased. The assessment in the implementation of the Community Partnership Program activities obtained an overall average score of 4.22 (with good criteria).
ACKNOWLEDGEMENTS

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REFERENCES


