

SOCIALIZATION AND TRAINING THE UTILIZATION OF ROSELLA IN CURUG KELURAHAN, KECAMATAN BOGOR BARAT, KOTA BOGOR

Farida Nuraeni^{a*)}, Tri Aminingsih^{a)}

^{a)} Universitas Pakuan, Bogor, Indonesia

^{*)} Corresponding Author: faridanuraeni@unpak.ac.id

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Abstract

Curug Village is a village in the West Bogor Subdistrict, Bogor City. Curug Village is a village that has a potential PKK Women's Group, but has not been able to be developed professionally. In the village of Curug, there are still very few pokja activities carried out, while the community is very enthusiastic and has the potential to develop and develop their skills. When viewed from the activities of each working group in the village of Curug, there are still very few. This is possibly due in part to the lack of delivery of various information or the development of the skills of its members in the form of counseling and training training to the village community. The solution offered by the university, in this case the Chemistry and Biology Study Program, Faculty of Mathematics and Natural Sciences, Pakuan University, is to provide counseling about roselle plants and the benefits of rosella for health as well as training in processing them into natural dyes, various functional foods and drinks. Competitions need to be held to maintain and maintain motivation in working in developing roselle flower processing. Long-term evaluation will be carried out through monitoring the results of the training. One of the medicinal plants that has the potential to be developed more optimally both for its cultivation and processing is the rosella plant. This plant has many health benefits including improving blood circulation, preventing high blood pressure, improving bowel performance and functioning as a tonic (strong medicine) and anti-cancer. The lack of public knowledge, especially the PKK group of Curug Village, in processing and optimizing the potential of medicinal plants is also a major obstacle to the diversification of roselle plant processing. The activity plan that will be carried out includes providing counseling about roselle plants and the benefits of rosella for health, providing explanations about how to care for roselle plants and providing roselle seeds for cultivation, counseling and training on processing rosella flower petals as natural dyes as well as functional food and drinks and practices by the participants. Processing of rosella flowers includes natural dyes, tea bags, syrups, sweets and instant rosella granules. In addition, there will also be competitions for participants with the theme of making healthy food and beverage products from Rosella as well as long-term evaluation through monitoring the results of the training which is carried out directly to the Kelurahan and Villages that have become partners.

Keywords: rosella flower; curug village; syrup; functional food.

I. INTRODUCTION

Based on the literature, rosella is very beneficial for health. Rosella (*Hibiscus sabdariffa* Linn) is a kind of hibiscus plant (*Hibiscus rocasinensis*) that can grow in all kinds of soil and is easy to care for. In the past, this plant was only known as an ornamental plant that was ignored but nowadays it is known as a nutritious plant. Flowers from plants can serve as a source of herbal medicinal ingredients and can be processed into syrups, jams, and sweets. This plant produces flowers at the age of 120 days and can be harvested continuously for a period of 3 months before finally being replaced by new seeds. This plant can be planted in the yard, yard and rice field. Rosella seedlings in the

form of seeds can be obtained at agricultural shops at a relatively cheap price of Rp. 15,000 / kg for planting 2000 m² of land [1]. Research on the efficacy of roselle in experimental animals, among others, can reduce cholesterol, triglycerides and LDL-C (Low Density Lipoprotein Cholesterol) [2]. The efficacy of rosella flowers is inseparable from the chemical composition in rosella flower petals. The chemical composition in rosella flower petals is a mixture of citric acid and malic acid 13%, anthocyanins (Gossipetin and hibiscin 2%, vitamin C 14 mg / 100 g, beta carotene 285/100 g, 2.5% fiber. has been standardized so that it contains 9.6 mg of anthocyanins (the natural red color of roselle flowers) every day for 4 weeks, able to reduce blood pressure which is not

significantly different from the administration of 5 mg of captopril / day. 52 L of water [3].

Efforts to make processed roselle are intended for the purpose of making drinks and food easier, more practical use, and preferred by children and adults [4]. Various health drinks that can be made from roselle flowers include rosella syrup, rosella stup, rosella gelatin, rosella tea and rosella jam. By learning how to cultivate rosella plants and processing rosella into natural dyes, functional foods and drinks, the community can prevent disease, which also means that they can reduce costs for medical treatment at a doctor /health center and this ability can be used to open new business fields for the surrounding community.

II. METHODS

The method of implementing community service consists of counseling, training, monitoring and evaluation, covering five stages, namely:

1. Provide counseling about rosella plants and the benefits of rosella for health. Counseling is carried out by means of lectures and discussions which will be delivered by qualified food experts and chemists in the use of natural ingredients as medicinal plants (back to nature).
2. Provide an explanation of how to care for rosella plants. The participants were given a module on how to cultivate rosella plants.
3. Provide an explanation of the manufacture of functional food and beverage products from rosella flower petals, in this case rosella syrup and jam.
4. Making rosella syrup and jam. Rosella flower syrup is made by mixing rosella with sugar. Rosella syrup can be made with the following composition: 500 g of fresh rosella flowers, 500g of granulated sugar and 1 L of water. All ingredients are boiled until the sugar dissolves for about 10 minutes. After that, it is cooled down and continued with filtering. Rosella syrup is ready to pack and can be used as a health drink. The dregs from making rosella can be used as an ingredient for roselle jam by mashing it using a blender.

III. RESULTS AND DISCUSSION

The science and technology that will be transferred to partners are techniques for cultivating rosella plants as well as techniques for processing rosella flowers into natural dyes, various functional foods and drinks that have the potential to maintain a healthy body. The PKK women's group has improved their skills in cultivating roselle techniques and processing them into healthy food and drinks so that in general they can increase human resources, especially the PKK group in the Curug village area of West Bogor Regency. The natural fiber-producing plant of

the Hibiscus genus which is quite popular in Indonesia is rosella (*Hibiscus sabdariffa* L.). The usefulness value of rosella is very wide for both food and health, so that the potential for roselle diversification is quite large [5]. Rosella plant processing techniques are also carried out to develop capabilities in the manufacture of various types of food and beverage products using rosella flowers. Processing of rosella flowers includes rosella syrup, instant rosella granules, rosella tea bags.

Counseling so as to produce potential cadres in self-development related to the cultivation and utilization of rosella flowers. Production process technology innovation in product diversification of roselle needs to be done to increase added value and optimize the utilization of roselle herbal bioactive components [6]. Thus it is hoped that it can improve the welfare of farmers and the production of national herbal rosella [7]. Development techniques for roselle plant processing are also carried out to develop types of functional food products made from roselle flowers so that the Curug Village area, especially PKK RW 14 mothers, becomes a home industry.

The implementation of PKM which was carried out online using the Zoom meeting on July 16, 2020 and attended by around 18 training participants, began with the opening and introduction of the PKM team with the PKK activator team leader and PKK participant members and the PKM team. Then a briefing was carried out by the head of the PKK activating team and the PKM team. The PKM team gave instructions on the procedures for attending the training and reading procedures for the activities to be carried out, as well as the operational steps for making processed products from rosella flowers, namely syrup and jam from rosella flowers and their health benefits. To make it easier for the training participants to understand, the PKM team presented about rosella flowers, their health benefits and how to make syrup and jam products, which are complemented by video tutorials as can be seen in Figure 1 below

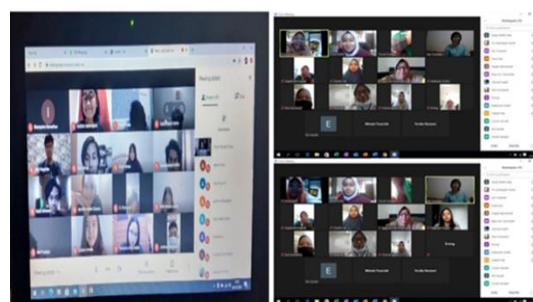


Figure 1. Online Meeting through Zoom Meeting between Training Participants and PKM Team

Figure 2 below can be seen the presentation of the PKM team's presentation to the training participants

and the video tutorial can be accessed on the available link, namely
https://www.youtube.com/watch?v=mVpE_zRwFw&feature=youtu.be

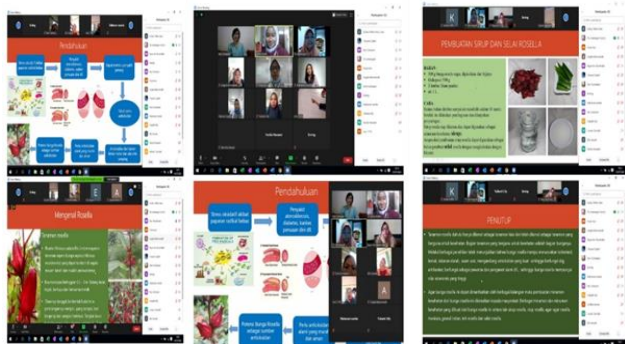


Figure 2. Presentation of the PKM Team on the Benefits and Processed Products of Rosella

During the training activities, the trainees participated in the training activities enthusiastically. This PKM activity was carried out online so that the practice of making processed roselle products was represented by one of the training participants with the results as can be seen in Figure 3 below:



Figure 3. Syrup and Jam from Processed Roselle Flowers

After the training, the participants were given a response questionnaire instrument. The response of the training participants on the PKM activity for the manufacture of processed roselle products was very good because above 90% gave very positive answers and the rest responded quite positively.

Based on the data from the questionnaire of the training participants, the training participants were basically impressed by the training in making processed rosella products, namely rosella syrup and jam. In addition, the training participants also felt that there was an increase in the realm of knowledge and skills in making rosella syrup and jam.

IV. CONCLUSION

Socialization and training participants on the benefits and processing of rosella into syrup and jam attended by PKK women in Curug village, West Bogor District, Bogor City were quite attractive and very useful in increasing the knowledge and skills of participants

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