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# Empowering Women Through the Making Soursop Jam in Bumi Jaya Village, Sukau Subdistrict, West Lampung Regency

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### **ABSTRACT**

Soursop fruit is one of the commodities in Bumi Jaya village, where soursop fruit is a fresh fruit that is easily damaged and spoils quickly. Therefore, training is needed to deal with this problem. The purpose of this service activity is to increase public knowledge through training in making soursop jam. The activity was carried out in January 2023 in Bumi Jaya Village, Suka District, West Lampung Regency. Respondents in the activity were Team PKK. The method of implementation is survey, education/ speech, practice/demo and evaluation. From this community service activity, it shows that the people of Bumi Jaya Village are enthusiastic in participating in activities starting from the socialization stage to practice/demo on how to make soursop jam, thus increasing knowledge in processing soursop fruit into soursop jam which is useful in product diversification and increasing product shelf life

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#### 1. Introduction

Bumi Jaya Village, Sukau District, is an area that has a lot of potential, especially in the agricultural sector. Its location in the highlands which has relatively cool temperatures makes the area a potential area for cultivating horticultural crops. One of the horticultural crops that can be found is the soursop fruit plant. Soursop is a fruit that is quite valuable economically; However, soursop fruit is a perishable fruit, meaning that the fruit is easily damaged, resulting in a decrease in the selling value of soursop fruit (**Septia et al., 2016, Sandi et al., 2023**). This perishable or rotten nature often results in losses for farmers or fruit traders. This is one of the problems that exist in Bumi Jaya Village, namely agricultural products such as soursop fruit found in people's yards are often not processed properly so that sometimes they are only sold directly or are used for personal consumption and even rot so they do not have a high selling value.

The amount of soursop fruit production is quite high, so further handling and processing is required to increase the shelf life. Training on soursop processing in Bumi Jaya Village is expected to help the community to increase the selling value of existing commodities so as to help the economy of the people of Bumi Jaya. One of the counseling efforts undertaken is to process soursop fruit so that it can be used for various types of processed food, one of which is by making jam.

Jam is a food product with a gel or semi-solid consistency made from fruit pulp. Gel or semi-solid consistency in jam is obtained from pectin compounds derived from fruit or pectin added from outside, sugar, sucrose and acid. This interaction occurs at high temperatures and is permanent after the temperature is lowered. The hardness of the gel depends on the concentration of sugar, pectin and acid in the slurry (**Trisnowati 2012**). Jam includes semi-solid foods or jam gel consistency obtained from sugar and acid pectin in fruit pulp

Soursop can be processed into jam provided that the level of ripeness is sufficient. This is because fruit ripeness is related to pectin which is an important factor in the formation of jam gel (**Ekaputi**, **2018**). Besides pectin, sugar and acid are also factors that can affect the quality of jam. The addition of sugar will activate pectin through the dehydration of pectin molecules. So the amount of sugar used depends on the concentration of pectin, both the pectin contained in the fruit and the pectin added (**Rahmah**, **2022**). Based on this, the purpose of this activity is to increase public knowledge regarding the processing of agricultural products, especially soursop fruit.

#### 2. Methods

Community service activities were carried out in January 2023 in Bumi Jaya Village, Sukau District, West Lampung Regency. Respondents in the activity were PKK team (Women for Family Welfare Development) mothers. The method of implementing this service is by taking several steps, namely 1) conducting surveys and coordinating with PKK team, 2) Counseling about soursop processing into jam, 3) Practice of making soursop jam, 4) evaluation of community service activities. Survey and coordination activities are aimed at exploring potentials and problems related to agricultural products and managing administration and permitting activities. Counselling was carried out orally with presentations explaining the potential of soursop fruit and how to make it into jam and followed by questions and answers and discussion. The practice is carried out after the presentation of the counselling material, the practice aims to directly apply how to make soursop jam. The final stage is an evaluation of extension activities whether there is an increase in understanding or not from the participants.

#### 3. Results and Discussions

This community service activity was attended by 10 PKK members. At the beginning of the counseling activity a pre-test was carried out and at the end of the activity a post-test was carried out. In conducting the pre-test and post-test the participants were given 5 questions about soursop fruit

processing. Of the 8 respondents who were asked questions, the average pre-test score was only 3.25 (Figure 1). This shows that this training activity is needed by PKK team. The next activity is socialization or counselling.

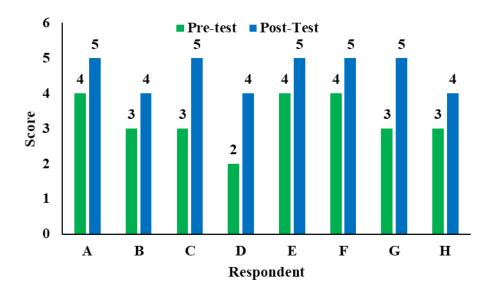


Figure 1. The level of knowledge of the PKK group before and after receiving training

Socialization activities were carried out by giving questionnaires to participants to determine their level of knowledge prior to training. Furthermore, by providing knowledge about the general characteristics of soursop fruit such as the content and benefits of soursop fruit, as well as how to process soursop fruit into soursop jam as an effort to diversify food and increase product shelf life. This activity aims to provide an understanding of the community to take advantage of the village's potential so that it becomes an effort to improve the community's economy through processing agricultural products into jam.



Figure 2. Socialization of soursop fruit processing

Based on Figure 2, it can be seen that PKK women enthusiastically participated in the activity from the beginning to the end of the process. Presentation of material in the form of making soursop fruit

jam increases curiosity which can be seen through discussions and questions and answers. The women actively asked about the characteristics of the fruit and the concentration of added sugar, as well as the cooking time in making the jam to form a semi-solid gel.

After the socialization or counseling activities, it is continued with practices/demonstrations of making soursop jam. This activity was carried out to increase the understanding and skills of PKK mothers in processing soursop fruit. The demonstration method is carried out by practicing making jam to the training participants through the stages that have been taught during the socialization.



Figure 3. Demo/practice on how to make soursop jam

Figure 3. shows that a demonstration method has been carried out by the community service team for PKK mothers. The first step in the activity is to prepare the tools and materials for making jam, which are the main ingredients of soursop fruit and sugar. This is made by mixing prepared ingredients such as one soursop fruit that has been mashed and 200 grams of white crystal sugar, then cooking it until it thickens for approximately 30 minutes. During cooking, the fruit pulp and sugar must be stirred constantly until they form a semi-solid gel. This effort is made so that PKK mothers can see and practice the results of learning directly. After the practice of making jam, a post-test session was then carried out to find out how the participants understood the material that had been presented and direct explanations through practice.

Based on the results of the post test on PKK mothers that there was an increase before and after training in soursop fruit processing (with a value of 4.6). The knowledge gained by the teaching participants is being able to know the characteristics of the fruit, the fruit content, and efforts to increase the shelf life of the product by processing it. Apart from that, making soursop jam is also beneficial in maximizing the potential of the village and it is hoped that there will be a continuation of the processing of soursop fruit into soursop jam to improve the community's economy.

#### 4. Conclusions

The conclusion of this service activity is that the people of Bumi Jaya Village are enthusiastic in participating in activities starting from the socialization stage to demonstrations on how to increase knowledge in processing soursop fruit into soursop jam which is useful in product diversification and increasing product shelf life.

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