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Training on the Utilization of Bada Fruit Innovation to Become a Functional Instant Drink as an Immune System Enhancer in the village of Teluk Majelis

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Abstract. The pedada fruit (Sonneratia caseolaris) tastes sour and has a distinctive pedada aroma, as well as a soft fruit texture, so it can be processed into several food products such as jenang, lunkhead, jam and syrup, but its development into an instant antioxidant and immune system boosting drink has not been processed yet. utilized. The highest content of vitamin C in broiler makes it taste sour and unpleasant to eat directly. To overcome this, an innovative functional instant drink powder with added sugar was created. This PPM aims to process pedada fruit which is often found and wasted in Teluk Majelis Village into effective innovations such as instant drinks, jelly candy, marshmallows and can open jobs. The method in this PPM includes counseling related to the benefits and nutritional content of bacada fruit as well as demonstrations on making pedada instant drinks, jelly candies and pedada marshmallows. The PPM results obtained pedada instant drink products, pedada jelly candies and pedada marshmallows which will be made into superior products in Teluk Majelis Village, Kuala Jambi, Tanjung Jabung Timur. From the results of monitoring and evaluation of PPM activities, it was found that the UMKM of Teluk Majelis Village had produced jelly candy and chest marshmallows and had been introduced through the Birthday Expo of East Tanjung Jabung Regency and had become the flagship product of Teluk Majelis Village which was useful as an immune system booster during the Covid-19 pandemic.

Keywords: pedada, instant drink, immune system

1 Introduction

Pedada fruit (Sonneratia caseolaris) is a mangrove fruit that lives in brackish waters and grows a lot around coastal areas. Ripe pedada fruit (Sonneratia caseolaris) has an attractive taste and aroma and is rich in fiber and minerals [3]. Bedada fruit (Sonneratia caseolaris) contains several bioactive compounds including flavonoids, luteolin, and luteolin 7-O-B-glucoside [5]. which have strong antioxidant activity [7] and are able to increase the immune system body [1].

Bedada fruit (Sonneratia caseolaris) has several advantages compared to other types of mangrove plants, namely the fruit is not toxic, the ripe fruit can be eaten directly, the taste is sour and the aroma is unique to pedada and the texture of the fruit is soft so that the fruit of Bedada (Sonneratia caseolaris) can be processed into several innovative products. foods such as jenang, dodol, jam and syrup [2], but their development into sweet and sour jelly candy, granulated pedada instant drinks and marshmallows as immune system enhancers have not been processed and utilized.

Teluk Majelis Village is located near the coast of brackish waters of mangrove forests where you can find lots of pedada fruit. So far, the pedada fruit has not been utilized optimally by the people there, because it tastes sour and is wasted a lot in the river and falls around the tree and is eaten by monkeys a lot. So that the pedada fruit can be utilized by changing its shape through food processing innovations in the form of pedada fruit jelly candy.

Jelly candy, marshmallows and broiler granules are functional food products that have high calories with the basic ingredients of sugar, water and fructose syrup. Jelly candies, marshmallows and broiler granules are very popular among all groups, from children to adults. Jelly and marshmallow candies have a soft texture due to the addition of hydrocolloid components such as agar, gum, pectin, starch, carrageenan, gelatin. Modification of the

candy jelly texture produces a product that is chewy, easy to print, does not stick to the mold and is easily removed from the mold [4].

Based on the above, we innovated to process Pedada fruit (Sonneratia caseolaris) into processed food products and instant drinks and at the same time as an antioxidant, with the presence of jelly candy, marshmallows and granules from Bedada fruit (Sonneratia caseolaris) which can be used by all groups, from from children to adults. Apart from that, it can be used as a multivitamin in disease prevention and increasing body resistance during the Covid 19 pandemic [8].

It is hoped that the jelly candy, marshmallows and granules from Pedada fruit (Sonneratia caseolaris) will provide opportunities for entrepreneurship for people who live along the coast, especially the Teluk Majelis village. Apart from that, the production of candy jelly can increase the income of the community there with big profits. This innovative product has very good prospects in the future because it can increase the existence of Pedada fruit (Sonneratia caseolaris) as a local plant in Indonesia and increase added value to the economy of the people of Jambi, especially for the East Tanjung Jabung district and make it a superior product in Teluk Majelis Village, Kuala Jambi District. East Tanjung Jabung Regency.

2 Method

The work procedures for implementing the community service program in the context of demonstration/training/assistance in the processing of breast fruit into instant food and beverage innovation products in the form of sweet and sour jelly candies, marshmallows and breast granules to enhance the body's immune system are as follows:

The dissemination of the benefits of pedada fruit as a functional food and beverage product consists of 4 stages, namely: 1) obtaining permits for the implementation of PPM activities by the implementing team; 2) meeting of the implementation team with the village head of Teluk Majelis, Kuala Jambi, East Tanjab, to discuss plans, work steps, and schedule of PPM activities to be carried out in the utilization of this pedada fruit. 3) implementation of demonstration/training/assistance activities in the processing of broiler fruit into sweet and sour jelly candy, marshmallows and instant granules 4) monitoring the evaluation of activities carried out in the PPM program to the people of Teluk Majleis, Kuala Jambi, Tanjab Timur

This participation included discussions with the PPM team and the Village Head of Teluk Majelis Village in the following activities: surveying bacada fruit shelters, preparing proposals, determining participants to be trained, namely 20 PKK cadres from Teluk Majelis Village, training on processing instant food and beverage products in the form of candy sweet and sour jelly, marshmallows and broiler granules.

Evaluation of program implementation and program sustainability after the completion of the implementation of Appropriate Technology activities for the community in the field in the form of: community participation in program implementation, the strategic position of the community as implementing elements, integration and togetherness with the local Kelurahan and Subdistrict while increasing regional potential is seen by the success of the program in utilizing the potential regions, compatibility of regional potentials, opening jobs and program activities, accuracy of programs on regional issues [6].

3 Results and Discussion

The results achieved in this PPM activity were the implementation of counseling on the use of bacada fruit into functional instant food and beverage innovation products from bacteri fruit such as sweet and sour jelly candy, marshmallows and pedada granules as a booster for the body's immune system which has high economic value.

This activity was initiated by coordinating with the head of Teluk Majelis Village regarding the implementation of PPM with the title "Training on the Utilization of Breast Fruit Innovations into Functional Instant Drinks as an Enhancer of the Immune System" in Teluk Majelis Village to 20 PKK cadres in Teluk Majelis Bay Village. The result of the coordination with the head of Teluk Majelis Village was that they were willing to become partners in implementing PPM activities as well as becoming related foster villages from training in processing food and beverage products made from oxtail.

This PPM activity was warmly welcomed by the PKK Kuala Jambi District mother who gave appreciation to the community service team for being able to increase the existence of the Pedada fruit (Sonneratia caseolaris) as a local plant in Indonesia and increase the added value of the economy of the people of Teluk Majelis Village, Kuala Jambi District, Tanjung Jabung Regency East especially. So far, pedada fruit has not been used and is only wasted, carried away by the currents and eaten by monkeys, this is because the taste of pedada fruit is very sour when consumed directly. With this training, it is hoped that in the future it will produce innovative health functional food and beverage products which will be used as superior products in Teluk Majelis village.

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Figure 1. Foreword from the PKK mother, Kuala Jambi District

The PKK Cadres of Teluk Majelis Village were very enthusiastic and active in participating in this activity, especially taking a direct role in the processing of instant drinks, jelly candy and marshmallows, before training or demonstrating the processing of instant food and beverage products, first explaining the benefits and contents of breast fruit as well as showing a video on how to process these products so that they can be used as a reference or guide during later training.

Figure 2. Explanation of the benefits of pedada fruit and video viewing

From the results of this socialization, it provided good benefits for the PKK Cadres of Teluk Majelis Village, where they gained insight and knowledge about how to process innovative functional health food and beverage products as well as the benefits and nutritional content of broiler fruit as an immune system booster during the Covid 19 pandemic. .

The next stage is training an direct demonstration of the processing of broiler fruit into jelly candy, marshmallows and instant drinks, where the pedada juice has been made first by taking the ripe pedada fruit then peeling the skin and taking the flesh by removing the seeds in the fruit flesh. the. Then blend the fruit flesh with a little water and strain it to get the pedada juice, so that the pedada juice lasts longer, it can be boiled until the pedada juice boils. The pedada fruit juice can be used to make pedada granules and jelly candy while the pulp of the fruit can be used as raw material for making marshmallows, so no material is wasted [10].

The following is a picture of PKK cadres from Teluk Majelis Village who are enthusiastic about making pedada granules, jelly candies and marshmallows.

Figure 3. Manufacture of pedada granules, jelly candies and marshmallows

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When making this functional instant food and drink, it is interspersed with questions from PKK cadres regarding alternative ingredients or substitutes if additional ingredients are not found, failures are encountered and solutions for ways to overcome problems that occur when making these products [9].

In this training, instant granules were produced, packed with small plastic, jelly candy and marshmallows. The stage needed a long time for the cooling process until the jelly candy and marshmallows were hard. as well as drying in the sun to get jelly candy that is hard and durable during storage and lasts a long time.

Figure 4. Sweet and sour jelly candy and marshmallows

After the production of innovative functional food and beverage products, a group photo was taken with the PKK Teluk Majelis cadre by displaying the products that had been produced. The PKK cadre was very happy and found it useful to gain knowledge about how to process this pedada fruit.

Figure 5. Group photo of PKK cadres in Teluk Majelis Village

Monitoring and evaluation of the PPM activities was carried out after one week of the activity process, it was found that the PKK members of the Teluk Majelis Village, especially the UP2K Melati PKK Team at Teluk Majelis Village, had tried and practiced directly making jelly candy, marshmallows and pedada granules. The results of this innovation of instant food and beverage products for bacada were exhibited at the STAND EXPO for the Birthday of East Tanjung Jabung Regency last October. The East Tanjung Jabung Regent appreciated this product and made it a superior product for the Teluk Majelis village because of the uniqueness of the product and there are no market or commercial products that use broiler raw materials to make jelly candies, broiler granules and marshmallows.

Figure 6. UP2K Melati's stand at the East Tanjab Birthday Expo

Based on the above, the aim of this Community Service has succeeded in making sweet and sour jelly candy, instant granulated pedada and pedada marshmallows to become the superior products of Teluk Majelis village and can open up business opportunities for the community related to increasing income and the economy for the community by take advantage of the natural resources that are there.

4 Conclusion

Results of activities It can be concluded that this activity Training on the Utilization of Medada Fruit Innovations to Become Functional Instant Drinks as an Enhancer of the Immune System in Teluk Majelis Village can provide more knowledge about the benefits of broiler fruit which has high economic value, produce innovative food and instant drink products from broiler fruit as an immune system enhancer bodies as well as increasing the creativity of human resources in the vicinity of Teluk Majelis Village, Kuala Jambi District, Tanjab Timur.

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