

Utilization of waste of old melinjo leaves for making quail egg pindang

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ABSTRACT

Community education activity have been carried out in RT 8 RW 06 Jatihandap Village Bandung with the title "Utilization of waste on melinjo leaves for production of quail egg pindang". The activity aims to give information to the public about the utilization of old melinjo leaf waste for making egg pindang. This activity was attended by housewives and young women as well as Neighborhood Association (RT) administrators (Chairman, Secretary, and Treasurer) of RT 8 RW 06 Jatihandap Village, Mandalajati District, Bandung City. The activity carried out was to introduce the preservation technology of eggs by using old melinjo leaf to produce in the process of making egg pindang. In addition, there were also discussions and demonstrations sessions on the use of pindang eggs for various types of processed foods. This activity received a positive response from the community. The community or participant was also very enthusiastic during the discussion and question-and-answer activities. The participants feel happy because they get the new knowledge and skills about making pindang eggs. With this activity, they know how to use old melinjo leaf waste for making egg pindang. The community also hopes that kind of this community education activity can be held continuously.

Keywords: Quail eggs pindang, old melinjo leaf, egg preservation technology

Introduction

Melinjo or belinjo (*Gnetum gnemon* Linn.) is a species plant of tree-shaped open seed (Gymnospermae) native to tropical Asia, Melanesia, and the Western Pacific. Melinjo's bioactive compound, resveratrol, has antibacterial and antioxidant activity. Melinjo has a beneficial effect as a food preservative, from flavor inhibitors to flavor enhancers (Lestari, 2013). The bioactive compounds contained in melinjo leaves include flavonoids, saponins, and tannins. Flavonoids are the largest group of natural phenolic compounds (Harbone, 1987 and Sjahid, 2008).

Consumption of melinjo leaves in West Java is quite high as a vegetable, leaving a lot of old melinjo leaf waste and it is still rarely used in daily life and industry. Old melinjo leaves can be used to preserve eggs, one of which is to be an ingredient in making egg pindang. The eggs used can be quail, chicken, or duck eggs.

Egg pindang is a type of Chinese cuisine, namely processed eggs that are boiled using certain herbs so that they have a distinctive taste, aroma, and appearance. Although originating in China and traditionally associated with Chinese cuisine, similar recipes and variations have been developed throughout Asia. In Indonesia, especially in Java, egg pindang are made using onion peels and guava leaves. Galangal and bay leaf are added during the boiling process to add aroma.

Food of animal origin is a source of protein and contains essential amino acids that are not supplied from other food ingredients, so it is very important for health. Animal protein is sourced from meat, milk, and eggs. Poultry (chicken) and quail eggs contain complete and high levels of essential and non-essential amino acids, making them suitable to fulfill human nutritional needs daily. Besides being easy to digest, the price is also affordable (Kusumorini, 2021). The nutritional composition of eggs consists of water 73.7%; protein 12.9%; 11.2% fat and 0.9% carbohydrates and almost no fat content in egg albumen (Yuwanta, 2010). The high yield of poultry eggs with quail productivity can reach 250-300 eggs per year, as well as chickens and ducks (Kusumorini, et al., 2020)

Mandala Jati is one of the sub-districts in the city of Bandung, West Java. Based on 2017 data, the population of the Mandala Jati is 67,652 people with a population density of approximately 91.01 people/ha (BPS, 2017). Jatihandap is one of the villages in the Mandala Jati sub-district which is located along Jatihandap street. It is a small densely populated area in the middle of the dense city of Bandung.

The low income of the residents of Jatihandap Village and the large number of people who want an increase in income, this reason encourage the author to create an activity that provides training to increase household income. One of the activities carried out is to introduce and provide training on how to preserve eggs. Eggs can be preserved by processing into egg pindang, salted eggs, century eggs, and others. Creativity in making products needs to be developed to reach a creative economy idea that is currently trending in Indonesia. Egg Processing and preservation activities need to be carried out as one of the household businesses in Jatihandap Village, Bandung City.

One of the activities that can be carried out based on these problems is community education activities regarding the utilization of old melinjo leaf waste. Old melinjo leaf can be easily obtained from the waste Cicaheum wet market. Preservation of eggs can be done by closing the egg pores with extract of the leaves that will make the egg more durable. The ingredients used for making egg pindang are various spices and salt as natural food preservatives. Old melinjo leaves produce color in eggs due to the absorption of natural pigments by the eggs during the boiling and soaking process. Egg pindang also has economic value to improve the economic level or income of the community.

Based on the description above, community education activity will be carried out regarding the utilization of Old Melinjo Leaf Waste for egg pindang production. The target of this activity is the community of Jatihandap Village which includes housewives/members of PKK (Family Welfare Education) and several neighborhood associations members with a total of 20 people.

Details of Activities and Methods

Community education is carried out through lectures and discussions which aim to explain about how to utilize the waste of old melinjo leaves to make egg pindang. This activity also explained the prospects and economic value of egg pindang products and their processed products. The demonstration activity provided hands-on skills on how to make quail eggs and chicken eggs. Ingredients that need to be prepared are chicken eggs, quail eggs, tea, old melinjo leaves, guava leaves, salt. The following are steps to make melinjo leaf egg pindang:

1. Chicken/quail eggs are washed thoroughly with cleansing ash and water
2. Put the guava leaves, tea, old melinjo leaves in a boiling pot, then arrange the eggs in layers.
3. Add 3 tablespoons of salt, add water until all the eggs are submerged.
4. Boil until cooked, remove from heat and leave for a while (2 hours), to get the color and taste of the pindang.
5. Boil again until cooked (spices such as crushed galangal and bay leaf can be added).
6. Remove from the heat and let soak in the boiling pot, drain after the water cools down.

Results and Discussion

The community education activity entitled "Utilizing Old Melinjo Leaf Waste for the Production of Pindang Quail Eggs" at RT 8 RW 06 Jatihandap Village, Mandalajati District, Bandung City. The procedures for making egg pindang are written in a booklet as a guide in the practice activity. Egg pindang are made from various spices and salt which are natural food preservatives. Old melinjo leaves produce color in eggs due to the absorption of natural pigments by the eggs during the boiling and soaking process. Clean eggs are then boiled over low heat for at least 2 hours and then cooled.



Figure 1. Community education activity of making pindang eggs

The Community education activity was carried out on November 30, 2021, in one of the residents' houses, attended by the Head of RT 8 (Neighborhood Association), and 20 participants were represented by mothers and teenage girls. The public's interest in this activity was quite good, indicated by the many questions that arose during the discussion. The high enthusiasm of the participants in this activity was due to the training activities for making pindang eggs had never been done before.

The community or participants were involved by seeing and practicing directly how to make egg pindang. After that the participants were convinced that old melinjo leaves can be used as natural ingredients in preserving egg, especially in the process of making egg pindang and producing food with a delicious taste. The community also felt happy because their knowledge increased by participating in this activity.

At the end of the activity, the team evaluates the level of understanding by asking several questions to the participants. The questions asked include how to process or make the egg a pindang and the benefits of melinjo leaves for egg preservation. Participants participated in the question and answer session enthusiastically, this session became lively because the organizers provided prizes for the participants who were able to answer questions. The head of the RT (neighborhood association) and the community felt happy and grateful for the implementation of community education activities in their area. Participants also hope kind of this activity can continue to be carried out in the future.

Conclusion

Community education activities carried out in RT 8 RW 06 Jatihandap Village, Mandalajati District, Bandung City have added insight and knowledge of the community on how to make egg pindang. The community also understands how to make pindang eggs using old melinjo leaf waste as natural ingredients for food preservation. It is necessary to carry out the community education activity continuously with other topics so that it can increase the knowledge and skills of the community to create an empowered society.

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