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Article

# Mushroom Cultivators to Grow and Develop with Oyster Mushroom Cultivation Business in Perumnas Belimbing Kelurahan Kuranji Sub-District

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**Abstract** 

The Belimbing Residential Area, which is densely populated and located near the market, has the potential to absorb the production of the Belimbing Youth Group's mushroom cultivation activities. However, since mushroom cultivation activities are still relatively new, the group needs help independently providing 100% mushroomgrowing media (baglog) and seedling production.. The fresh oyster mushrooms they produce must be marketed immediately as they quickly spoil, and their quality decreases if stored for too long. Additionally, the need for knowledge in the post-harvest processing of oyster mushrooms is also a hurdle in developing the mushroom cultivation business of the Belimbing Youth Group. The primary objective of the community service activity is to enhance the abilities and experience of the Belimbing Youth Group in producing and processing mushroom cultivation products to create higher economic value. Initial outreach activities will focus on oyster mushroom seedling production and processing products, training on product processing and packaging techniques, entrepreneurial coaching, and further guidance, all forming part of technology transfer activities to the Belimbing Youth Group. In the first year, counselling and training on oyster mushroom seedling production, construction of a sterilization room, manufacture of baglog sterilization equipment, and repair of mushroom house (kumbung) were carried out. Training activities for producing F0 and F1 oyster mushroom seedlings and making baglog sterilization equipment with a capacity of 100 baglogs have impacted the independence of the Belimbing Youth Group in providing seedlings and baglog for oyster mushrooms. A sterilization room and repaired kumbung support the success of seeding and increasing the yield of oyster mushrooms. The success of the activities in the first year is likely to be sustainable and support the following year's activities, which will focus on post-harvest processing activities, packaging, and marketing of processed products.

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## INTRODUCTION

Belimbing Housing is one of the largest housing estates in the city of Padang. The location of this housing is quite far from the city by taking approximately 30 minutes to drive. The situation of a densely populated housing location with diverse social life makes Belimbing housing potential in

business development. Belimbing Housing has a youth group that is trying to develop a mushroom cultivation business which is relatively new. This group was formed on October 13, 2020, consisting of 5 young people who are used to entrepreneurship. In oyster mushroom entrepreneurship, this group is still very unfamiliar because they only collect information from the internet, but in entrepreneurship this group is fairly mature. This group has interesting ideas to develop, especially in developing processed mushroom products so that they can compete in this advanced environment. Because this group is still relatively new, while their marketing is still in fresh form, so it is necessary to provide guidance to find the right technology to increase the selling value of processed mushrooms.

Based on observations at the location of the Youth Mushroom Cultivation group, they have difficulty selling fresh mushrooms because mushrooms are very easily damaged. The damage that occurs is characteristic of fresh oyster mushrooms if not handled quickly. Therefore, a technology is needed that can utilize oyster mushrooms quickly, precisely, and easily applied while having an impact in increasing the economic value of the mushroom cultivation youth group's business and becoming an icon product for the Belimbing community.

Another problem encountered in the field is the lack of knowledge of youth groups in post-harvest handling of mushrooms into processed foods that can actually improve the economy of youth groups. Due to the lack of knowledge of post-harvest handling, oyster mushroom farmers often experience losses when the harvest is abundant. If the number of oyster mushroom harvests is at a peak point, the price of mushrooms will drop. However, if the mushrooms are not harvested immediately, the specifications of the mushrooms that experience post-harvesting are not in accordance with consumer specifications, as a result the mushrooms do not sell. These problems can be overcome by making processed oyster mushroom products that have the potential to be developed. Among the processed products are mushroom rendang, shredded mushrooms, mushroom meatballs, and mushroom nuggets. With the existence of various processed products from this mushroom, it will provide benefits for farming families. In addition to processing oyster mushrooms into various processed products, this activity also provides counseling on proper packaging for various products. Counseling on product labeling will also be provided so that processed oyster mushroom products are in demand by the community.

The purpose of this program is to improve the ability and experience of this youth group in processing mushroom cultivation products to produce higher economic value so that later it will help or become an example of the surrounding community.

This service program will help this developing business to be carried out in the form of the following stages: 1) Initial counseling of Oyster Mushroom Processed Products 2) Training on Processing and Packaging Techniques for Oyster Mushroom Processed Products 3). Guidance on entrepreneurial aspects 4). Further guidance.

#### IMPLEMENTATION METHODS

# **Methods and Stages of Activity Implementation**

The Community Partnership Program scheme to help businesses develop in Perumnas Belimbing will be carried out in the form of the following initial stages:

1. First stage: Initial Counseling on Oyster Mushroom Breeding and Oyster Mushroom Processed Products

Counseling on the utilization of oyster mushroom processed products in increasing the economic value of oyster mushrooms as commercially marketable products is carried out as an initial process to arouse the willingness of the community and farmers to not just stick to selling raw materials. In this stage, the service team will convey the nutritional content and benefits when consumed. In addition, an explanation is also given about the importance of using raw materials available in one's own area to improve food security and the family economy from available resources.

2. Second stage: Training on Processing Techniques and Packaging of Processed Mushroom Products oyster mushroom

This training will be taught directly to the oyster mushroom processing training participants through a process of demonstration and direct practice by the participants. Then for the packaging process, tool assistance is provided followed by the practice of packaging the oyster mushroom processed products produced using the tools provided. Then the correct labeling technique is also conveyed along with examples of labels that will be provided by the service team.

3. The third stage: Coaching in Entrepreneurship Aspects
Coaching on important aspects of entrepreneurship is then also taught to equip participants.

Participants are given product innovation material to foster enthusiasm and ability to open new business opportunities and capture business opportunities. This includes providing an overview of product introduction techniques in the market such as participating in exhibitions, displaying products at kiosks and hotels around Padang city, as well as marketing on line via the internet.

# 4. Stage Four: Follow-up guidance

Obstacles in the process of making processed oyster mushroom products and also in marketing their products will certainly be encountered in the field. Therefore, after the counseling and training process takes place, for the next days guidance is given to participants if there are obstacles, so that participants are able to produce and market processed oyster mushroom products in relatively larger quantities.

## RESULT AND DISCUSSION

Community service runs smoothly in the Limau Manis Prosperous Oyster Mushroom Cultivation Group, Limau Manis Village, Pauh District. Community service in collaboration with LPPM Andalas University, Limau Manis Village and Belimbing Regional Youth Group. The number of group members present amounted to 8 people.

The partner problem that we solved this first year was the nursery problem. Partners still depend on other oyster mushroom farmers in procuring seeds. And purchased seeds can also increase the cost of oyster mushroom cultivation so that profits will decrease. Apart from dependence on seeds, the partner problem that we solve is the reproduction of oyster mushroom growing media (Baglog). Partners still buy baglogs at a price of Rp. 5,000 per baglog. This is also an obstacle to getting profit from the cultivation of oyster mushrooms.

The first year of activities carried out were counseling and training on Oyster Mushroom breeding, making sterilization rooms, repairing barns, and making baglog sterilizers. The Belimbing youth group was given briefings and hands-on practice regarding F0 and F1 nurseries so that they could be independent in providing seeds. In addition to conducting F0 and F1 seedlings, the group is also equipped with knowledge and practice on how to propagate and sterilize baglogs so that the group can sustainably produce fresh oyster mushrooms. With these activities, our partners have been able to be independent in providing seeds and growing media from oyster mushrooms. Counseling activities can be seen in Figure 1.



Figure 1: Counseling together with youth

The sterilization room is a program that has been carried out in this year's activities. The purpose of the sterilization room is to support the success of breeding. In addition to the sterilization room, we also procured a tool to sterilize the growing medium (baglog) with a capacity of 100 baglogs in one process (Permana, RD., 2022). Barn improvements have been made this year with the aim of increasing oyster mushroom yields. This increase in yield will increase the turnover of partners who will later be able to develop this oyster mushroom cultivation business towards the production of processed oyster mushroom products. Barn improvement plays an important role in increasing cultivation productivity because a sterile barn prevents contamination (Meutia R F., 2022).



Figure 2. Training activities for making F0 and F1 seedlings

This activity aims to monitor partner activities after students leave the group location. Monitoring and evaluation is carried out by the Community Service Team by going directly to the location. This monitoring and evaluation activity is carried out by: holding discussions with farmer groups, regarding the problems faced after the assistance activities, so that problem solving is sought, for example how to carry out F0 and F1 seedlings. Communication established in monitoring activities through cellphone communication media.



Figure 3. F1 Seedlings from the Youth Nursery in Belimbing

#### **CONCLUSION**

This community service program will help this growing business to be carried out in the form of the following stages: 1) Initial counseling on Oyster Mushroom Processed Products 2) Training on Processing and Packaging Techniques for Oyster Mushroom Processed Products 3). Guidance on entrepreneurial aspects 4). Follow-up guidance. This program is expected that later the group can develop the business to be bigger so as to improve the economy of surrounding farmers and become an example for the general public to want to farm entrepreneurship.

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