

INCREASING PRODUCTIVITY OF OYSTER MUSHROOM HARVEST BY APPLYING KUMBUNG CULTIVATION SANITATION

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ABSTRACT

Limau Manis Village is one of the villages in Pauh District, Padang City. Oyster mushroom cultivation can be carried out by farmer groups because the technology used is appropriate technology. Oyster mushroom cultivation can use equipment that is very familiar to the community and easy to obtain. Another advantage of oyster mushroom cultivation is that land use is not too large and there are not many pest attacks on oyster mushrooms. Oyster mushroom has a very broad market. the importance of kumbung sanitation to the members of the Sejahtera Limau Manis Oyster Mushroom Cultivation Group and making improvements to the kumbung of one of the members as a pilot for an ideal kumbung design.

Keywords: Oyster Mushroom, Limau Manis, Sanitation, Kumbung

INTRODUCTION

Limau Manis Village is one of the villages in Pauh District, Padang City. The existing topographic conditions affect the socio-economic conditions of the community, and land availability. Land use in the Limau Manis Village is dominated by agricultural areas (rice fields, fields). The Limau Manis Village has a group of farmers who cultivate oyster mushrooms. The target as program implementation partners is the Sejahtera Limau Manis Oyster Mushroom Cultivation Group. The Prosperous Lime Mushroom Cultivation Group (LMS) has 31 members. Oyster mushroom cultivation can be carried out by farmer groups because the technology used is appropriate technology. Oyster mushroom cultivation can use equipment that is very familiar to the community and easy to obtain. Another advantage of oyster mushroom cultivation is that land use is not too large and there are not many pest attacks on oyster mushrooms. Oyster mushroom has a very broad market. Oyster mushroom consumers are not only the middle class, the upper class economic people are also fond of oyster mushrooms, and there are many processed menus for oyster mushrooms in hotel classes. Oyster mushroom business opportunities will increasingly develop considering the several advantages possessed by oyster mushrooms and market developments that show positive trends.

The problem encountered in the oyster mushroom cultivation group was that the cultivation yield was lower than market demand. Based on the results of a review of the cultivation location and discussions with members of the LMS group, an overview of the cause of the problem was obtained, namely the poor sanitary condition of the kumbung due to the lack of knowledge of the LMS group regarding the sanitation of the kumbung and the design of the kumbung which was less than ideal for an environment for growing oyster mushrooms.

In order to increase the productivity of oyster mushrooms, good sanitation and kumbung design are needed. Good sanitation and kumbung design will support the formation of an ideal growing environment for the growth of oyster mushrooms and reduce the disturbance of pests such as beetles and other destructive fungi. Therefore the Community Service Team held outreach activities about the importance of kumbung sanitation to members of the Sejahtera Limau Manis Oyster Mushroom Cultivation Group and made repairs to one member's kumbung as a pilot for an ideal kumbung design

ACTIVITY METHODOLOGY

1. Kumbung Sanitation Counseling

Extension activities are carried out by the method of delivering material by the presenter to the extension participants. The material was prepared in the form of power point slides which were displayed in front of the counseling participants using laptops and in-focus projectors. After the material was delivered, it was followed by discussion and question and answer.

2. Repair Kumbung

Kumbung repairs were carried out based on the results of a survey on the condition of the kumbung that had been carried out in activity 1 (Socialization and Review of Training Activities for Making F0 Seeds and Sanitation of Oyster Mushroom Kumbung). The results of the survey are used to calculate the material requirements needed to repair the barn. The materials needed are wood, tin roof, sand, cement, brick and GRC board. Further improvement of the kumbung is carried out according to the kumbung design which meets the requirements in terms of sanitation and is able to provide an optimal growing environment for the growth of oyster mushrooms.

ACTIVITY RESULTS

A. Counseling on Kumbung Sanitation

The kumbung sanitation extension activities will be held on Saturday, October 16, 2021, 13.00 - 15.30 WIB at the Darul Ishlah Mosque, Kec. Pauh, Padang City. Presentation of counseling material with the theme "The importance of applying sanitation in oyster mushroom cultivation which aims to increase oyster mushroom productivity" was delivered by Risa Meutia Fiana S.TP., M.P. and Shalati Febjislami, S.P., M.Sc. (Image 1). The counseling activity was attended by 30 members of the LMS group.



Figure 1. Submission of material about kumbung sanitation

The counseling material given was the importance of doing kumbung sanitation because by doing good sanitation, the growth of wild mushrooms outside of cultivated mushrooms can be controlled. Baglog contamination can be minimized by applying good kumbung sanitation. How to sterilize kumbung was also given in this counseling. Kumbung sterilization is carried out by spraying a disinfectant when it is about to dismantle baglogs of oyster mushrooms that are no longer productive. Spraying of disinfectants is carried out when entering new baglogs. In addition, the community service team also provided kumbung designs that pay attention to sanitation, tips on keeping the kumbung clean and the impact of not applying good sanitation on kumbung. One of the impacts is crop failure.

Discussion and question and answer activities were carried out after the delivery of the material. From the discussion and question and answer activities it was discovered that there were group members who still had minimal information because they still ignored the conditions that caused the poor sanitation of the kumbung. The condition in question is like letting a lot of cobwebs stick to the roof or between the shelves, not immediately throwing away contaminated baglogs and ventilation that is left open. After receiving counseling, the group members came to know that these conditions needed to be followed up immediately so as not to affect the productivity of the mushrooms cultivated in the kumbung.



Figure 2. Group photo after extension activities

B. Kumbung Repair

Kumbung repairs are carried out at the kumbung owned by the group leader. The kumbung is used as an example because its location is shaded by trees so it is not too hot and can provide suitable environmental conditions for mushroom growth. Based on the results of the previous survey, the condition of the kumbung was with tarpaulin walls/banners and a tin roof. The ventilation section is also open without being covered with a net (Figure 3). The floor is still half earth and has no drains for drainage. Some of the legs of the shelves for placing baglogs were weathered because of the damp floor (Figure 4). Baglogs that were damaged by pests or other fungi were also seen

being stored on shelves in the kumbung (Figure 5).



Figure 3. Kumbung before being repaired



Figure 4. Moist dirt floor and weathered shelf legs



Figure 5. Damaged (unproductive) Baglog

The Kumbung was designed to be taller, the walls were replaced with some bricks at the bottom and GRC boards at the top. The floor is also cemented and drains are made so that the water left over from the watering is easy to dispose of and does not stagnate. The weathered shelves are also replaced with new ones. The roof uses zinc and does not use thatch leaves because it is quite shaded by trees so it doesn't get too hot. Some materials for making kumbung are adjusted to the availability of materials that are easy to obtain and try to function not much different from the material they should be (Figure 6).



Figure 6. Kumbung under repair



Figure 7. Kumbung after completion of the repair phase

CONCLUSION

The results of counseling activities and repair of kumbung which apply sanitation are:

1. There is an increase in the knowledge of the LMS group regarding the importance of maintaining kumbung sanitation, how to maintain kumbung sanitation and the impact if the sanitation of kumbung is not maintained properly.
2. Increased awareness of the LMS group to maintain kumbung sanitation so that it is expected to increase the productivity of cultivated oyster mushrooms.
3. Availability of a barn that has a design that meets good sanitation requirements and can provide environmental conditions for mushroom growth close to their natural habitat.

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