

POST-HARVEST OPTIMIZATION OF TURMERIC IN MICRO, SMALL, AND MEDIUM ENTERPRISES (MSME) SANS BERKAH EMPON

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Abstrak

Sans Berkah Empon merupakan salah satu usaha yang menangani pasca panen berbagai jenis empon-empon salah satunya adalah kunyit. Sans berkah membeli kunyit segar dari berbagai lokasi di Jawa Tengah dan Jawa Timur. Kunyit yang diperoleh dijual dalam berbagai bentuk produk seperti kunyit segar yang telah dibersihkan dikirim ke pasar tradisional, serta rajangan kunyit yang telah dikeringkan. Meskipun telah melakukan pengolahan pasca panen berupa perajangan dan pengeringan, sebagian besar kunyit yang dijual Sans Berkah masih berupa kunyit segar yang rentan mengalami pembusukan, berjamur serta bertunas sehingga memerlukan perlakuan yang tepat. Tim Pengabdian Kepada Masyarakat dari Fakultas Pertanian Universitas Slamet Riyadi, memberikan pelatihan terkait optimalisasi pasca panen empon-empon pada bulan juli – september 2024 dan berdasarkan hasil evaluasi terdapat perbaikan kualitas empon-empon dan adanya diversifikasi produk.

Kata kunci : Empon-empon, Pasca panen, Simplisia.

Abstract

Sans Berkah Empon is a business that handles various types of post-harvest empon, including turmeric. Sans Berkah Empon buys fresh turmeric from various locations in Central Java and East Java. The turmeric obtained is sold in various product forms, such as fresh turmeric that has been cleaned and sent to traditional markets and chopped turmeric that has been dried. Even though post-harvest processing has been carried out in the form of chopping and drying, most of the turmeric sold by Sans Berkah Empon is still fresh turmeric susceptible to rotting, mould and sprouting, so it requires proper treatment. The Community Service Team from the Faculty of Agriculture, Universitas Slamet Riyadi, provided training related to post-harvest optimization of empon-empon in July – September 2024 and based on the evaluation results there was an improvement in the quality of empon-empon and product diversification.

Keywords: *Empon-empon, post-harvest, Simplicia*

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1. INTRODUCTION

Turmeric (*Curcuma domestica* Val.) is a spice and medicinal plant from the Zingibera-cea family. Turmeric has many benefits in everyday life. Besides being used as an ingredient in cooking, the community often uses turmeric as a traditional medicine (Suprihatin et al., 2020). The potential of turmeric as a medicinal plant can continue to be developed into a national commercial and superior commodity for export as a source of foreign exchange for the country (Handriatni, 2020). Turmeric is an agricultural product currently in great demand among the public. Turmeric consumption continues to increase yearly (Anggarani et al., 2019). Lifestyle changes are the main factor in increasing empon-empon consumption. Lifestyle changes towards prevention rather than treatment are also a supporting factor. Apart from that, the Kartasura area of Sukoharjo is a centre for fried ducks, which require ground turmeric daily as a cooking spice. Turmeric requires proper post-harvest handling so that it has a longer shelf life, does not become mouldy and does not sprout.

Sans Berkah Empon is a business that handles various types of post-harvest empon in Kartasura Sukoharjo, one of which is turmeric. Sans is blessed to buy fresh empon-empon from various locations in Central Java and East Java. The empon that is obtained is sold in various product forms, such as fresh empon that has been cleaned and sent to traditional markets, as well as chopped empon that has been dried. Even though post-harvest processing has been carried out in the form of chopping and drying, most of the empon-empon sold without

blessings are still fresh empon-empon. Fresh empon is susceptible to rotting, mold and sprouting so it requires proper treatment (Sianto et al., 2023). Even though the empon has been dried, the risk of rotting can still occur if the drying is less than optimal (Prihapsara et al., 2021)

From an economic perspective, the price of empon-empon simplicia is much higher than that of fresh empon-empon. Thus, selling simplicia empon-empon products is more profitable for farmers than selling fresh empon-empon products (Cahya & Prabowo, 2019). However, the quality of the empon-empon simplicia must meet the quality requirements as a raw material for herbal medicine and herbal medicine. The problem of limited knowledge regarding empon-empon simplicia production techniques, and inadequate empon-empon simplicia production facilities are the main problems for empon-empon farmers in general (Susetyohadi & Adha, 2021).

2. IMPLEMENTATION METHOD

Community Service Activities were carried out at UMKM Sans Berkah Empon Makamhaji Kartasura Sukoharjo from July to September 2024. The service method was carried out in three stages: preparation, starting with situation analysis; implementation, carried out with training activities; and evaluation, comparing the results before and after the implementation.

- a. Preparation Stage: In the preparation stage, a survey is carried out to determine locations and targets, the situation of target partners, and the preparation of activity materials.
- b. Implementation Stage: At the activity implementation stage,

partners receive training related to the post-harvest management of turmeric for the production of *Simplicia*.

- c. Evaluation Stage: At the end of the activity, an evaluation is carried out to reveal the success of the implementation, both in terms of theory and practice and the benefits felt by the participants.

3. RESULTS AND DISCUSSION

a. Situation Analysis

The activity began with analysing the situation at MSME Sans Berkah Empon. Sans Berkah Empon manages various empon-empon for sale, fresh and chopped, and the most abundant is turmeric. So far, Sans Berkah Empon MSMEs have carried out post-harvest management, but the management carried out could be more optimal. Based on initial data, 10% of the turmeric stored sprouted and became mouldy because it was stored in damp conditions. Apart from that, drying chopped turmeric takes approximately three days on a sunny day, and some of the middle parts of the chopped turmeric are still wet and, therefore, mouldy.



Figure 1. Turmeric Storage

b. Implementation

Training is carried out by providing material related to the influence of post-harvest handling on product quality, drying techniques to prevent mould growth and damage, and storage methods to maintain freshness. Moreover, evaluate the post-harvest

management that has been carried out so far and provide corrections related to processes that are not appropriate. Once fresh turmeric is obtained from farmers, it has been sorted and graded according to size and quality. The turmeric washing process is carried out by soaking the turmeric in water with three water changes so that the turmeric's moisture content is high. Turmeric should be washed with running water at high pressure so the dirt is washed clean. After that, the turmeric is dried in the hot sun on a tarpaulin, making the turmeric wrinkled. After washing the turmeric, air dry it for one day on a woven bamboo mat and not directly touch the ground, so air circulation is better.

Furthermore, turmeric that will be sold fresh is packaged according to its grade. Meanwhile, *simplicia* products are chopped to 2-3 cm thick. The drying process is initially carried out by placing the chopped pieces on woven bamboo and placing them directly on the ground so that the risk of contamination and humidity is high. The chopped pieces should be dried in the sun at a distance of 4 cm from the ground to reduce the risk of contamination and speed up drying time. The dried chopped products are stored in mesh sacks and on wooden pallets to maintain humidity. Some of the chopped products are further processed into powder.



Drying before training



Drying after training

Figure 2. Drying turmeric before and after training

c. Evaluation

Based on the results of the evaluation by Sans Berkah Empon, it can reduce the percentage of turmeric that sprouts and becomes mouldy to 5%. This is because there have been improvements in the post-harvest management process, especially in the washing and drying processes. Apart from that, Sans Berkah Empon is increasing the added value of empon-empon by making turmeric powder to increase shelf life, selling value and market reach.

4. CONCLUSION

Based on the service activities that have been carried out, proper post-harvest management is needed to maintain the quality of turmeric and prevent it from becoming mouldy, rotten, or sprouting. The community service activities that have been carried out can improve the post-harvest management of turmeric in Sans Berkah Empon, as shown by the reduction in the amount of turmeric that sprouts and becomes mouldy.

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