

Workshop on Utilizing Lemongrass (*Cymbopogon citratus*) for Tea and Soap for PKK Members

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Abstract. The Workshop on Utilizing Lemongrass (*Cymbopogon citratus*) for Tea and Soap for PKK (PKK is a community organization aimed at empowering women and participating in the development of Indonesia's welfare). Members in the Pasirwangi Sub-District, Ujungberung District, Bandung City is part of the Community Service Learning (KKN) program conducted by students as a form of community service. This program aims to connect students with the local community through beneficial and practical activities, allowing them to apply the knowledge gained in college to everyday life. The activities included presentations on the making and benefits of lemongrass tea and soap, followed by demonstrations and the distribution of free lemongrass tea. The motivation from the Buruan Sae program and the habit of consuming herbal drinks made lemongrass products appealing to the community. After the workshop on lemongrass utilization, 80% of the PKK members expressed interest in making lemongrass tea or soap, based on post-test data showing their understanding of the plant's benefits. The results of this training are expected to positively impact and foster a sense of independence and creativity within the community, supporting their welfare through local products.

Keywords: lemongrass, lemongrass soap, lemongrass tea, PKK, workshop

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INTRODUCTION

Pasirwangi is one of the villages in Ujungberung District, Bandung City. In 2022, Ujungberung District has an area of 6.24 (km²/sq.km), and Pasirwangi Subdistrict covers 23.24% of its area, namely 1.30 (km²/sq.km) (Bandung City Central Statistics Agency, 2024). In 2020, Pasirwangi Village had a population of 16,308 people. The population is 8,138 male residents and 8,170 female residents. The majority of religious adherents in Ujungberung District are Muslim, with the number of religious adherents in 2022 amounting to 89,429, followed by Protestant Christianity, Catholicism, Hinduism, Buddhism, and other beliefs (Bandung City Central Statistics Agency, 2024).

Based on the results of the analysis, it was found that one of the routine programs implemented in Pasir Wangi Village was the Buruan Sae program. Buruan Sae is an integrated urban farming program promoted by the Food and Agriculture Department (DISPANGTAN) of Bandung City. It aims to overcome food inequality in the city. Pasir Wangi Village itself implements several plants planted as part of the Buruan Sae program, one of which is

lemongrass.

Lemongrass, *Cymbopogon citratus*, is a plant from the grass family and a tall shrub. Lemongrass is often used as a cooking spice by Indonesian people because it has a distinctive aroma and abundant benefits (Kapanewon Kokap, 2020). There are two types of lemongrass: kitchen lemongrass with thick stems and shorter leaf lengths and citronella with small stems with longer leaf lengths and a more fragrant aroma. With its fragrance, the lemongrass plant can produce aromatherapy containing various ingredients such as citrate, citronellol, linalol, geraniol, a-pinene, kamfene, sabinene, myrsene, psimene, limonene, cisosimen, terpineol, citronellal, borneol, and farsenol which have a calming effect. balancing, stimulant, antidepressant, and vasodilator (Lotu, 2020). Lemongrass has a wide variety of benefits, both in the context of tea drinks and in the form of essential oil used in aromatherapy. The distinctive lemon flavor of lemongrass provides a pleasant fresh taste in tea and a relaxing and calming effect when used in aromatherapy. The essential oils rich in compounds such as citronella, geraniol, and limonene in lemongrass provide anti neuro depressant and sedative properties, help overcome

insomnia, improve mood, and reduce anxiety levels (Muzayyana et al, 2023). Apart from that, the polyphenol compounds in lemongrass also have potential as antioxidants that can fight free radicals and provide other health benefits such as antiviral and anti-cancer properties. Thus, lemongrass is a very valuable plant because it has significant benefits for physical and mental health. Lemongrass can also be used for various things, one of which is soap.

Lemongrass soap can be used to wash hands. Hand washing is a simple sanitation action, namely rubbing your hands together using a substance and then rinsing with water to remove microorganisms and especially to prevent infection (Ministry of Health, Directorate General of Health, 2022). According to WHO (2009), hand washing is a procedure/action of cleaning hands using soap and running water or hand rub with an antiseptic (alcohol-based).

Real Work Lecture (KKN) activities are one part of the Padjadjaran University program, which implements the Tri Dharma of Higher Education in the form of community service. The main aim of KKN is to bridge the scope of higher education with the needs of society. Through participation in KKN, it is hoped that students can gain a deeper understanding of the real conditions of society, identify various problems faced, and develop solutions that are relevant to each individual's field of study. This program is implemented by aligning research activities and community service from lecturers and students across various disciplines while still carrying Unpad's values of togetherness. KKN will be held from January 5 to January 6, 2024, at Pasir Wangi Village, Ujung Berung District, Bandung City, West Java. targeting the surrounding community, especially women administrators and PKK members. The programs that we will carry out include a preliminary survey, analysis of the survey results, data collection on needs according to the survey results, and carrying out programs according to the results of the analysis.

Therefore, a Sub Group 3 program was held, namely outreach regarding the use of lemongrass plants to make soap and tea products to PKK women. The key to the success of this program is cooperation between the parties involved and the application of the knowledge that students have.

Through this activity, participants are expected to gain knowledge and skills in processing lemongrass into products with high selling value, such as herbal tea and natural soap. Apart from providing theoretical understanding, this workshop

is also equipped with direct practical sessions that aim to improve participants' technical skills in the production process. The positive impact of this activity is quite significant, including increasing public awareness of the potential of local plants as a source of additional income. By utilizing lemongrass, PKK members can create innovative products that can be used and marketed, thus opening up new business opportunities at the local level. For KKN-PPM students, this activity aims to be a place to apply theories that have been studied previously in lectures on campus.

The aim of holding a Workshop on Using Lemongrass Plants to Make Tea and Soap is to provide education to PKK members and the surrounding community about the economic and health benefits of the lemongrass plant, which until now may only have been known as a kitchen spice.

METHODS

Our activities, as part of the Integrative KKN-PPM program, include a series of activities in the form of counseling and workshops on the use of lemongrass plants as tea and soap for PKK women in Pasirwangi Village, Ujungberung District. Before carrying out the activity, we had a discussion regarding the activities to be carried out with the field supervisor via Zoom Meeting and also communicated with the sub-district officials and PKK women via WhatsApp. This activity was carried out directly in the Pasirwangi Village office hall, Ujungberung District, Bandung City, on January 23, 2023, at 08.00-11.00 WIB.

In the first session, we presented material on how to make lemongrass tea, its benefits, how to make lemongrass soap, and how to wash your hands properly. Then, in the next session, we held a demonstration and gave free lemongrass tea to PKK women.

RESULTS AND DISCUSSION

The existence of lemongrass cultivation in the Buruan Sae program in Pasirwangi Village, so that access to lemongrass plants becomes easier, can motivate the community to manage lemongrass plants into health products for personal consumption or processed products that have sales value and can increase people's desire to learn about the benefits of lemongrass plants. This. The community targeted for the workshop and socialization of lemongrass plants into lemongrass tea and soap is a population with an age range of

Table 1. Posttest Statistics Calculations

		Test 1	Test 2	Test 3
N	Valid	15	15	15
	Missing	0	0	0
Mean		1.0000	1.0000	1.2667
Median		1.0000	1.0000	1.0000
Mode		1.00	1.00	1.00
Std. Deviation		00000	00000	45774
Sum		15.00	15.00	19.00

around 30-50 years. People in this age range generally like herbal drinks such as herbal medicine and ginger tea to increase their body's immunity. The habit of consuming these herbal drinks can also increase the probability of people's interest in lemongrass tea and soap products. This is supported by the benefits offered and the processing method, which is relatively practical and is a non-pharmacological action, namely an effort carried out without drugs to overcome a problem, which can be an alternative for people to overcome difficulty sleeping and get sufficient sleep latency.

Series of Activities

At the "Workshop on the Use of Lemongrass (*Cymbopogon citratus*) for tea and tabun for PKK members in Pasirwangi Village, Ujungberung District, Bandung City," there were several series of events, namely opening and welcoming speeches given by representatives of the PKK management and representatives of KKN members. Next, there is a presentation regarding the benefits of the lemongrass plant in general, an explanation of the relationship and impact of lemongrass tea on sleep latency, namely that lemongrass tea can help shorten sleep latency by providing a relaxing effect, which can make it easier for someone to fall asleep more quickly.

**Figure 1.** Material Delivering

After the presentation, there was also a demonstration of making lemongrass tea. This allows participants to see the steps directly, understanding each detail precisely so that each individual can implement them. Next, there is an explanation of the use of lemongrass, which can also be made into soap. Lemongrass soap is an effective cleanser with antibacterial properties and a refreshing, fresh aroma. Ready-made lemongrass soap is used as an ingredient in hand-washing demonstrations that aim to increase public awareness regarding how to wash hands correctly and effectively to prevent the spread of germs and maintain cleanliness. In closing, posttests and flyers containing further information about the benefits of lemongrass and a summary of the workshop material were distributed to ensure that participants could further understand the material that had been presented.

After carrying out the workshop and socialization to see the achievement of the learning objectives, PKK members learned the benefits of the lemongrass plant and its processed products. A posttest with three questions was distributed online. The questions were: 1) do you know what products can be made from lemongrass after attending the workshop? (YES NO) 2) After attending the workshop, do you know the benefits of lemongrass? (YES NO) 3) After attending the workshop, are you interested in making lemongrass tea or soap products? (YES NO)

Table 1 lists the results of the workshop and socialization on the use of lemongrass plants as a mixture of tea and soap by the women of the PKK mobilization team.

Based on the table 1. Posttest Statistics Calculation result: The average participant answered "1" or "Yes" for three questions that were asked. Based on the survey results obtained, in question 1 regarding participants' knowledge of what products are produced from the use of lemongrass plants, it shows that all participants answered "Yes", indicating that all participants

know about products that can be made from lemongrass plants. In question 2 regarding participants' knowledge of the use of lemongrass, it shows that all participants answered "Yes", indicating that all participants know the benefits of lemongrass. Then, in question 3, regarding participants' interest in making processed products from the lemongrass plant, it showed that 80% of participants were interested in making processed products such as lemongrass tea or lemongrass soap after attending the workshop.



Figure 2. Photo of The Event Committee With PKK Members

The presence of environmental motivation (the *Buruan Sae* program) and habits ingrained in society (consuming herbal drinks) make this processed lemongrass product attractive in the eyes of the public. This is proven by posttest data from PKK members who listened during the event so they knew the benefits of the lemongrass plant and its processed products, and 80% of PKK members were interested in making processed lemongrass tea or lemongrass soap after the "Workshop on Using Lemongrass (*Cymbopogon citratus*) for Tea and Soap." for PKK members in Pasirwangi District, Ujungberung City, Bandung City." It is hoped that the results of this training can have a significant positive impact, as well as encourage a sense of independence and creativity in the community in developing local products so that they can contribute to community welfare through the use of lemongrass plants which are abundant and can continue to be developed into sharing processed products (Kapanewon Kokap, 2020). The activity documentation is presented in Figure 2.

CONCLUSION

A workshop on the use of lemongrass plants (*Cymbopogon citratus*) in tea and soap aimed at PKK members in Pasirwangi Village, Ujungberung

District, Bandung City, has succeeded in educating and increasing awareness of PKK members regarding the benefits of lemongrass and its potential in various aspects. Based on the data obtained, participants were interested in using lemongrass to make tea and soap, which indicates the great potential for economic and social benefits for society. This workshop provides an example of how education and skills-building can empower communities. With the potential to improve economic and social welfare at the local level. This workshop is also useful as a model of community empowerment through education provided by students and skills development, with the potential to positively impact the local economy and community welfare.

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