

**Improving Entrepreneurial Skills Through Training
in Making Local Material-Based Reed Diffuser Aromatherapy
for the Productive Age Community**

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Abstract: Habaring Hurung is one of the sub-districts in Bukit Batu District, Palangka Raya City, where most of the people work as farmers of vegetables and various types of flowering plants, such as Kenanga Flowers (*Cananga odorata*). However, the abundance of Kenanga flowers has not been utilized optimally by residents. Therefore, this service activity aims to improve entrepreneurial skills among people of productive age in Habaring Hurung Subdistrict by making reed diffuser aromatherapy products from Kenanga flowers. This service activity is carried out based on the ABCD method (asset-based community development) on September 4, 2023, at the Habaring Hurung Sub District Office Hall with 34 participants. The results showed that the activity participants stated the activity theme according to what was needed. Apart from that, the material presented is also easy to understand, so it can increase participants' knowledge and skills in processing Kenanga flower reed diffuser aromatherapy. This activity is expected to provide local residents with the knowledge and skills to utilize local materials in products of high economic and useful value.

Keywords: aromatherapy; habaring hurung; kenanga flower; reed difusser

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Received: 2 November 2023 **Accepted:** 9 August 2024 **Published:** 16 November 2024
DOI : <https://doi.org/10.20527/btjpm.v6i4.10737>

How to cite: Sudyana, I. N., Agnestisia, R., Irmawan, M., Cahyani, R. R., Krissilvio, E. J., & Toepak, E. P. (2024). Improving entrepreneurial skills through training in making local material-based reed diffuser aromatherapy for the productive age community. *Bubungan Tinggi: Jurnal Pengabdian Masyarakat*, 6 (4), 966-.

INTRODUCTION

Anxiety disorders are among the most common mental health issues faced by people today. This situation has been exacerbated by the COVID-19 pandemic, causing 4.6% of the population in Indonesia to feel more anxious, depressed, and lonely and find it harder to concentrate than before (Wahdi et al., 2022). This condition

should not be taken lightly, as mental health is a crucial component in supporting a country's development process, where human resources are the determining factor for Indonesia's future, particularly in supporting the Vision of Golden Indonesia 2045.

Aromatherapy is an alternative medicine that uses aromatic substances, such as essential oils (Azizah et al.,

2022; Cholifah & Nuriyanah, 2018; Hakim et al., 2019). Essential oils are defined as a mixture of volatile organic compounds that carry the distinctive characteristics of the plant or flower from which they are derived. One of the benefits of essential oils is to reduce stress levels, provide a relaxing sensation to the body, and improve sleep quality (Caroline, 2022; Zulpadly et al., 2022). On the other hand, a reed diffuser is a type of room freshener that uses a glass container filled with essential oils, where the aroma is dispersed through rattan sticks.

One recommended essential oil for aromatherapy is ylang-ylang oil (*Cananga odorata*), as it has a distinctive fragrance (Budi et al., 2018; Soedarmanto et al., 2023; Surbakti et al., 2022). Additionally, it provides a relaxing sensation, making it suitable as a primary ingredient in reed diffuser products.

Habaring Hurung is located in Bukit Batu District, Palangka Raya City, where most of the population works as farmers (Surjanto, 2017). This village is known to have fertile land. Besides growing local vegetables and fruits, farmers in Habaring Hurung are also known to cultivate various types of flowering plants, such as ylang-ylang. However, one of the villagers mentioned that the residents need to optimally utilize the abundant ylang-ylang flowers. Therefore, to maximize its use, this community service activity aims to improve entrepreneurial skills through training in making reed diffuser aromatherapy from ylang-ylang flowers for the productive-age community in Habaring Hurung Village.

METHOD

The community service activity was conducted in Habaring Hurung Village, Bukit Batu District, Palangka Raya City, using the ABCD (asset-based community development) method. This

method is based on an approach aimed at optimizing the potential or assets of a particular commodity (Alhamuddin et al., 2020; Garcia, 2020). The activities carried out according to this method began with identifying the assets possessed by the community where the service was implemented. The results obtained were then recorded to determine opportunities that can be developed to maximize the area's potential. The following are the stages of the activities conducted.

Coordination Stage

The preparation stage began with the university issuing an assignment letter, coordinating with relevant parties for permission to conduct the community service activity, conducting a site survey, registering participants, and communicating the topic.

Stage of Making Aromatherapy Reed Diffusers Based on Local Materials

The community service team created the aromatherapy reed diffuser by preparing the tools and materials. The tools used included glass rods, beakers, a hot plate, a mortar, a scale, reed diffuser sticks, bottles, and a measuring glass. The materials used were ylang-ylang essential oil obtained through distillation, olive oil, 70% alcohol, baby oil, and distilled water.

The reed diffuser was made by adding ten tablespoons of baby oil as the base oil into a glass diffuser container, then mixing it with two tablespoons of 70% alcohol and 60 drops of ylang-ylang essential oil. The reed sticks were then placed into the glass diffuser container to absorb the oil, and the reed diffuser was ready for use.

For optimal use, the reed sticks can be flipped every 3 hours to ensure even oil absorption and allow the fragrance to disperse throughout the room.

Activity Implementation Stage

The training activity was conducted on September 4, 2023, at the Habaring Hurung Village Hall, with 35 participants representing the productive-age community. The participants were selected based on the following criteria: they were men and women aged 25 to 65 years, working as farmers, entrepreneurs, or homemakers, and interested in the topic of this community service activity.

The training methods were socialization and demonstration. During socialization, the material presented included the benefits of reed diffusers and how to make and use them. The next activity demonstrated the reed diffuser-making process for the participants.

Activity Evaluation Stage

The community service activity was evaluated by having participants fill out a questionnaire regarding the benefits and their satisfaction with the activity. The questionnaire results were measured using a Likert scale of 1 to 5 (Rosdiana & Mahliza, 2022; Yusmar et al., 2023). The questionnaire included statements about the following aspects: (1) the relevance of the socialization theme to

the participants' needs; (2) the ease of understanding the material presented by the instructors; (3) the increase in participants' knowledge and understanding after the socialization and demonstration; (4) the implementation of the activity; (5) the usefulness of the activity; and (6) the sustainability of the activity for the participants. Attendance and active participation during the event were also evaluated.

RESULT AND DISCUSSION

In implementing the socialization activity, the methods used were lectures and discussions. The lecture aimed to deliver the material, while the discussion allowed participants to ask questions, express their opinions, and assess their understanding of the material presented (see Figure 1). The socialization results indicated that participants were very enthusiastic about the activity, as evidenced by their active participation during the discussions. Some participants also expressed interest in continuing the development of the product, with the hope that it could eventually be commercialized to boost the local economy.



(a)



(b)

Figure 1 (a) Socialization of reed diffuser production and (b) Socialization activity

After the socialization phase, the next step was demonstrating the reed diffuser production process. The reed diffusers were then distributed to the participants following the training session. Additionally, participants were asked to

complete a questionnaire to evaluate the execution of the activity. The questionnaire results were analyzed using a Likert scale of 1–5, as presented in Table 1.

Table 1 Results of the evaluation questionnaire completed by 34 participants

No	Questions	Scoring Scale				
		5	4	3	2	1
1	The theme of the community service activity met the needs of the participants.	41,1%	53%	5,9%	-	-
2	The material presented was easy for the participants to understand.	41,2%	58,8 %	-	-	-
3	Participants' knowledge increased after participating in community service.	41,2%	58,8 %	-	-	-
4	The execution of the community service activity was well done.	38,2%	61,8%	-	-	-
5	The community service activity was deemed beneficial.	52,9%	47,1%	-	-	-
6	The participants can continue the community service activity.	29,4%	70,6%	-	-	-

Method Description: Likert Scale (Nopriyanti et al., 2022): 5, Strongly agree; 4, Agree; 3, Neutral; 2, Disagree; 1, Strongly disagree

Table 1 shows that 53% of participants agreed, and 41.1% strongly agreed that the theme of the activity met their needs, although 5.6% of participants chose to disagree. This discrepancy attracted the attention of the community service team. Consequently, interviews were conducted with participants to gather further information. The interviews revealed that participants, primarily farmers, were more interested in products enhancing agricultural yields.

The questionnaire data also indicated that 58.8% of participants agreed, and 41.2% strongly agreed, that the material presented was easy to understand. This finding correlates with the questionnaire results showing that 58.8% of participants agreed and 41.2% strongly agreed that their knowledge had increased following the activity. Furthermore, 61.8% of participants agreed, and 38.2% strongly agreed that the activity was well executed.

Overall, the community service activity met expectations, as participants found it very beneficial, and plans are in place to continue with the initiative.

Reed diffuser products are listed in Figure 2.



Figure 2 Reed diffuser product

CONCLUSION

The community service activity held on September 4, 2023, at the Balai Kantor Kelurahan Habaring Hurung was deemed successful in providing residents with the knowledge and skills to transform ylang-ylang flowers into high-value and economically beneficial products. This success was evidenced by the enthusiasm of the participants throughout the activity. The results of the questionnaire also indicated that participants felt the theme of the activity met their needs. Furthermore, the

material presented was easy to understand, which enhanced the participants' knowledge of processing ylang-ylang flowers into aromatherapy reed diffusers.

ACKNOWLEDGEMENT

We would like to extend our sincere gratitude to the Faculty of Mathematics and Natural Sciences, University of Palangka Raya, for their support through the DIPA grant funding for 2023, with grant number 578/UN.24.10/PL/2023.

REFERENCES

- Alhamuddin, A., Aziz, H., Inten, D. N., & Mulyani, D. (2020). Pemberdayaan berbasis asset based community development untuk meningkatkan kompetensi profesional guru madrasah di era industri 4.0. *International Journal of Community Service Learning*, 4(4), 321-331.
- Azizah, S. R., Qotrunnada, N., Suraya, S. V., Ferdiansyah, H. Y., & Pratiwi, E. D. (2022). Kajian pustaka pemanfaatan essential oils sebagai aromaterapi dalam perawatan kulit. *MEDFARM: Jurnal Farmasi Dan Kesehatan*, 11(1), 62–77.
- Biro Adpim. (2021). Wagub: Kalteng kaya akan potensi ekspor di bidang pertanian. biro administrasi pimpinan sekretariat daerah Provinsi Kalimantan Tengah.
- Budi, J. S., Damayanti, N. Y., Dhani, Y. R., & Dewi, N. A. (2018). Ekstraksi dan karakterisasi minyak atsiri bunga kenanga (*Cananga odorata*) dan aplikasinya sebagai penolak nyamuk pada lotion dan parfum. *Jurnal Kimia*, 12(1), 19-24.
- Caroline, I. R. (2022). Kajian pustaka: tinjauan efektivitas penggunaan minyak atsiri sebagai aromaterapi. *MEDFARM: Jurnal Farmasi dan Kesehatan*, 11(2), 263-275.
- Cholifah, S., & Nuriyanah, T. E. (2018). Aromaterapi lemon menurunkan mual muntah pada ibu hamil Trimester I. *Jurnal Kebidanan Midwiferia*, 4(1), 36-43.
- Hakim, R. J., Mulyani, Y., Hendrawati, T. Y., & Ismiyati, I. (2019). Pemilihan bagian tanaman jeruk purut (*Citrus Hystrix Dc*) potensial sebagai minyak essential aromaterapi hasil proses maserasi dengan metode analytical hierarkhi process (AHP). *Prosiding Semnastek*.
- García, I. (2020). Asset-based community development (ABCD): Core principles. *Research handbook on community development* (pp. 67-75). Edward Elgar Publishing.
- Ministry of Trade of The Republic Indonesia. (2011). Indonesian Essential Oils.
- Nopriyanti, N., Kurniawan, E. D., Darlius, D., & Harlin, H. (2022). Pelatihan pembuatan media pembelajaran elektronik untuk guru SMK Lingua Prima. *Bubungan Tinggi: Jurnal Pengabdian Masyarakat*, 4(2), 459. <https://doi.org/10.20527/btjpm.v4i2.4867>
- Rosdiana, R., & Mahliza, F. (2022). pemanfaatan aplikasi bukuwarung dalam pencatatan dan pengelolaan keuangan UMKM Di Wilayah Kembangan Selatan. *PEMANAS: Jurnal Pengabdian Masyarakat Nasional*, 2(1), 36–43. <https://doi.org/https://dx.doi.org/10.2441/pemanas.v2i1.15413>.
- Soedarmanto, H., Adawiyah, R., Diana, N., Setiaati, E., Yuniati, & Ayu Nurhany, F. (2023). product development strategy for essential oil made from jasmine, cananga flowers, and roses in banjar regency of South Kalimantan. *Universal Journal of Science and Technology*, 2(1).
- Surbakti, C. I., Sianipar, A. Y., & Prayoga, A. (2022). Formulasi Dan aktivitas kombinasi minyak minyak

- kenanga (*Cananga Odorata*) dan minyak kemangi (*Ocimum Basilium L.*) pada sediaan lilin aromaterapi. *Jurnal Teknologi Kesehatan Dan Ilmu Sosial (TEKESNOS)*, 4(2), 533-537.
- Wahdi, A. E., Setyawan, A., Putri, Y. A., Wilopo, S. A., Erskine, H. E., Wallis, K., McGrath, C., Blondell, S. J., Whiteford, H. A., Scott, J. G., Blum, R., Fine, S., Li, M., & Ramaiya, A. (2022). INAMHS: Indonesia-National Adolescent Mental Health Survey. <https://qcmhr.org/wpcontent/uploads/2023/02/I-NAMHS-Report-Bahasa-Indonesia.pdf/>
- Yusmar, F., Putra, P. D. A., Ahmad, N., & Wicaksono, I. (2023). Pelatihan model project-based learning (PjBL) berbasis STEM di SMP Negeri 2 Masesan, Bondowoso. *Bubungan Tinggi: Jurnal Pengabdian Masyarakat*, 5(4), 1437. <https://doi.org/10.20527/btjpm.v5i4.9399>
- Zulpadly, M. F., Ermawati, D. E., Sasongko, H., Artanti, A. N., Rohmani, S., Kundarto, W., & Utami, D. T. (2022). Pelatihan pemanfaatan minyak atsiri sebagai bahan aktif balsam aromaterapi kepada warga Kelurahan Mojosongo. *Bubungan Tinggi: Jurnal Pengabdian Masyarakat*, 4(4), 1314. <https://doi.org/10.20527/btjpm.v4i4.6684>