

**HAND SANITIZER WITH EUCALYPTUS SCENT FOR THE COMMUNITY AS A
CONTRIBUTION TO DEALING WITH PANDEMIC CONDITIONS:
A COMMUNITY SERVICE REPORT**

Rini^{1*}, Kesuma Sayuti¹, Fauzan Azima¹, and Eddwina Aidila Fitria²

¹Department of Agricultural Product Technology Andalas University

²Department of Agricultural Product Technology, Eka Sakti University

*Corresponding author: rini59@yahoo.com

ABSTRACT

Background: This activity was carried out to participate in preventing the spread of the COVID 19 virus in the city of Padang, West Sumatera Province. **Methodology:** The hand sanitizer was produced independently and was distribute to the public society in Padang City for period of November 2020. **Conclusion:** The distribution of eucalyptus flavored hand sanitizers provided another variant of existing hand sanitizer. The distinctive aroma of eucalyptus flavored hand sanitizers is very popular with the community and is expected to increase their awareness of using hand sanitizers to maintain their sanitation during the new normal in the current COVID 19 pandemic era.

Keywords: eucalyptus, hand sanitizer, public services, andalas university

INTRODUCTION

Hand sanitizers have emerged as a critical weapon in the fight against the coronavirus illness 2019 (COVID-19) (Pradhan et al., 2020). The disease has spread swiftly over the world, demanding strict measures and regulations to prevent it from spreading further. Hand hygiene has been proposed as one of the most important strategies (Boyce, and Pittet, 2002). Hand sanitizers are products that are applied to the hands and rubbed in to kill pathogenic bacteria. These items are meant to dry quickly after use, obviating the need for soap, water, and drying aids like towels. Generally, the main materials of hand sanitizer consist of alcohol and water with addition of specific aroma such as lemon (Abuga and Nasser, 2021).

The use of essential oils also has properties against microbial growth inhibition, such as eucalyptus oil, which can also be combined in the manufacture of hand sanitizers. Therefore, in this activity, a hand sanitizer was made using eucalyptus oil as a mixing ingredient for hand sanitizer which is expected to provide different product variations to the public. With the presence of this product, it is hoped that it can increase public interest in preferring to use hand sanitizers in their daily lives.

METHODOLOGY

This activity was conducted on November 2020. The hand sanitizer was made independently by the academic staff of Department of Agricultural Product Technology, Andalas University. The eucalyptus oil was also distilled independently at the laboratory of Department of Agricultural Product Technology, Andalas University. The main ingredients of the hand sanitizer were etalon, glycerin and eucalyptus oil. The produced hand sanitizer was then distributed at some mosques in Padang City, West Sumatera Province. Distribution is supported by the participation of alumni who work at another university such as Eka Sakti University.

RESULTS AND DISCUSSION

Figure 1 indicates the product of aromatic hand sanitizer derived from eucalyptus oil. The product is packaged in bottles with a volume of 100 mL. This packaging is very practical because it can be stored in a clothes pocket and even in a bag.



Fig. 1 Hand sanitizer derived from eucalyptus oil

Figure 2 shows the documentation of the handover of hand sanitizer products to community representatives at the Grand Mosque of West Sumatra Province. At the time of delivery, the hand sanitizer products were already being used by the community. Positive responses are given by the community because of the specific aroma produced. Apart from the sanitizing effect, aromatic effects will also be obtained with the use of this product. Vecchio et al., 2016 proposed the beneficial of eucalyptus oil as raw materials in perfumery, cosmetics, food, beverages, aromatherapy and phytotherapy.



Fig. 2 The distribution of hand sanitizer products to community representatives at the Grand Mosque of West Sumatra Province

CONCLUSION

The production and distribution of hand sanitizer that made from eucalyptus oil was conducted by the academic staff of Department of Agricultural Product Technology Andalas University. The production of eucalyptus oil hand sanitizer can be a forum for the development of essential oil-based products that are useful for the community in tackling the current COVID 19 disaster.

ACKNOWLEDGMENTS

The Department of Agricultural Product Technology, Andalas University acknowledged the support from the Faculty of Agricultural Technology for this activity.

REFERENCES

- Pradhan, D., Biswasroy, P., Kumar N. P., Ghosh, G. and Rath, G. 2020. A Review of Current Interventions for COVID-19 Prevention. *Arch. Med. Res.* 2020, 51, 363–374.
- Boyce, J.M. and Pittet, D. 2002. Healthcare Infection Control Practices Advisory Committee; Society for Healthcare Epidemiology of America; Association for Professionals in Infection Control; Infectious Diseases Society of America; Hand Hygiene Task Force. Guideline for Hand Hygiene in Health-Care Settings: Recommendations of the Healthcare Infection Control Practices Advisory Committee and the HICPAC/SHEA/APIC/IDSA Hand Hygiene Task Force. *Infect. Control Hosp. Epidemiol.* 23, S3–S40.
- Abuga, K., and Nasser, N. 2021. Alcohol-Based Hand Sanitizers in COVID-19 Prevention: A Multidimensional Perspective. *Pharmacy.* 9. 64. 10.3390/pharmacy9010064.
- Vecchio, M., Claudia, L., Clara, M. 2016. Beneficial and Healthy Properties of Eucalyptus Plants: A Great Potential Use. *The Open Agriculture Journal.* 10. 52-57. 10.2174/1874331501610010052.