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LEMON FLAVORED CLEANER TO PROTECT THE SOCIETY ON LARGE-SCALE SOCIAL RESTRICTIONS IN PADANG CITY, WEST SUMATERA PROVINCE

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ABSTRACT

Background: The corona pandemic has wreaked havoc all across the world, especially in Indonesia. Hand washing with soap or hand sanitizer is one approach to help prevent the transmission of the corona virus. To aid in the prevention of the corona virus, a variety of hand sanitizers have been developed. Methodology: Therefore, hand sanitizers made from alcohol with lemon aroma have been produced and distributed to the community around the residence of the academic community of Andalas University. This hand sanitizer is made independently using ingredients such as alcohol, glycerin, water, hydrogen peroxide and lemon extract. Conclusion: The distributed hand sanitizer is highly accepted by the community because of the increasing need for personal hygiene due to the increasingly massive spread of the corona virus. It is hoped that this activity can be done continuously.

Keywords: alcohol based-hand sanitizer, lemon, community services, andalas university

INTRODUCTION

It has been identified that many health practitioners recommend frequent hand hygiene as a method to help prevent disease during the COVID-19 pandemic. For the general population, it is advisable to use soap and water, as well as hand sanitizers that contain at least 60% alcohol if water is not accessible (Leslie and Zhou, 2021; Manaye et al., 2020). Moreover, the most effective hand sanitizers are alcohol-based formulations with a concentration of 62–95 percent alcohol, which may denaturize microbial proteins and inactivate viruses (Dixit et al., 2014; Kramer et al., 2006).

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At this time, due to the very high need for hand sanitizers, the price of this product is very expensive. Therefore, it needed a program that can provide this product free of charge to the community. Therefore, the academic community from the agricultural product technology department of Andalas University tried to make hand sanitizers and distribute them to the people around their places of residence. It is hoped that this program can improve the personal hygiene of the community.

METHODOLOGY

This activity was conducted around May 2020. The hand sanitizer was made entirely by academics from Andalas University's Department of Agricultural Product Technology. Andalas University's Department of Agricultural Product Technology's laboratory also developed the lemon extract. The main ingredients in hand sanitizer were ethanol, glycerin, hydrogen peroxide, and water. The hand sanitizer was then given in public locations near the residences of academic employees from Andalas University's Department of Agricultural Product Technology.

RESULTS AND DISCUSSION

Figure 1 shows the outcome of lemon aromatic alcohol based hand sanitizer. The product is packaged in bottles with a capacity of 100 mL. This package is quite useful because it can be stored in a clothes pocket or even a bag.



Fig. 1 Alcohol based hand sanitizer with lemon aroma

Figure 2 shows the documentation of community representatives receiving the produced hand sanitizer. The neighborhood was directly using the hand sanitizer. The community has responded positively due to the importance of personal hygiene for against the corona virus. The distribution has been conducted in several places such as mosque, medical centre and traditional market. The distribution placed has been chosen according to the residence of the academic staff of Department of Agricultural Product Technology Andalas University. Controlling COVID-19 in Indonesia is difficult due to low indicators of personal hygiene and insufficient sanitation. In order to control COVID-19, policymakers

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must focus on hygiene and sanitation issues (Purnama and Susanna, 2020). As a result, the distribution of hand sanitizers can serve to improve the community's personal hygiene.



Fig. 2 The distribution of alcohol based-hand sanitizer to community representatives.

CONCLUSION

Academic staff of the Andalas University Agricultural Product Technology Department have produced and distributed hand sanitizers made from lemon-flavored alcohol. This activity is highly appreciated by the community and is expected to be carried out periodically in the future.

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