



INTERNATIONAL EXHIBITION & SYMPOSIUM ON PRODUCTIVITY, INNOVATION, KNOWLEDGE & EDUCATION

“Optimizing Innovation in Knowledge, Education and Design”

EXTENDED ABSTRACT



e ISBN 978-967-2948-56-8



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Azni Syafena Andin Salamet
Nurfaznim Shuib

Cover design : Syahrini Shawalludin
Layout : Syahrini Shawalludin

eISBN 978-967-2948-56-8

Published by:
Universiti Teknologi MARA (UiTM) Cawangan Kedah,
Sungai Petani Campus,
08400 Merbok,
Kedah,
Malaysia.

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Assalamualaikum warahmatullahi wabarakatuh,



First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality. I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services. By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality. I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said
RECTOR
UiTM KEDAH BRANCH



WELCOME MESSAGE (i-SPIKE 2023 CHAIR)



We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPIKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "*Optimizing Innovation in Knowledge, Education, & Design*". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPIKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPIKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail

Chair

3rd International Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPIKE 2023)

MORUSSCENTED CANDLE

Farehan Binti Fauzi
Sekolah Menengah Kebangsaan Taman Selayang
g-74321342@moe-dl.edu.my

Lam Mei Shan
Sekolah Menengah Kebangsaan Taman Selayang
m-7814032@moe-dl.edu.my

Muhamad Haziq Bin Azizan
Sekolah Menengah Kebangsaan Taman Selayang
m-8082902@moe-dl.edu.my

Syahzanani Binti Mohd Kamal
Sekolah Menengah Kebangsaan Taman Selayang
m-7981675@moe-dl.edu.my

Muhamad Syamil Bin Zulkhairi
Sekolah Menengah Kebangsaan Taman Selayang
m-8194315@moe-dl.edu.my

ABSTRACT

‘Morusscented Candle’ is a combined name from the word scented candle and mulberry while the word morus is a genus of flowering plants in the family Moraceae which means plant. Morusscented Candle is a scented candle which is made from mulberry and mostly natural ingredients. For instance, it was made from mulberry, natural beeswax, essential oil and extract colour of mulberry. Morusscented candle is a product that can reduce chemical position and replaced the existing scented candle. Most common scented candle was made by chemical thing such as stearic acid which is helps to harden the wax and improve the candle’s burn time. Our product is aimed to make a fragrance while using a natural thing. We have done a considerable of experiment and research in choosing the best ingredients that we use for our product must be safe and reasonable price. The colour of mulberry was extracted before mix with beeswax and essential oil. Other than that, we put three or four mulberries to decorate our product. We also want to let people know benefits of mulberry. We have ensure that Morusscented Candle is safe and can be use everywhere at anytime.

Keywords: natural scented candle, reasonable price, easy to use, environment friendly.

INTRODUCTION

Mulberry or the scientific name Morus is a genus of flowering plants in the family of Moraceae, consisting of diverse species of deciduous trees commonly known as mulberries growing wild and under cultivation in many temperate world regions. Our team feels that society today all over the world is not getting enough knowledge about how to utilize the usage of mulberry to

the fullest for themselves and their surrounding. For instance, it's very rare to see mulberry trees planted in people's houses or in our surroundings. Therefore, we try to popularize the use of mulberry by creating this product so that many people get to learn and know about the benefits of mulberry. Our product name is Morusscented Candle, which is a scented candle that was made from mulberries from our own mulberry trees that were planted in our school. We also added some ingredients that were mostly natural and didn't harm our environment. Why did we choose to create a scented candle from mulberry you ask? As I said before we want to popularize mulberry fruit all across the world, especially in Malaysia by using it as the main ingredient for our product. Moreover, in the market, the mulberry-smelling scented candle is very rare to find and highly-cost compared to other-smelling candles. For that reason, our team hopes that creating this product will make it easier for people to find a mulberry-smelling scented candle in the market at a cheaper price.

PROBLEM STATEMENT

The unpleasant smell of the room can have a lot of effects on students. Students have a hard time focusing on their studies when they try to study In their room. This is because due to the odor of air that is not fresh. The amount of unpleasant smell slowly increases and prevents students from focusing when they study. Moreover, there are so many other effects of unpleasant smells on us. Which is it also decreases the quality of sleep. This is because the recycling of the air in the room is left unfresh and untreated. This may cause the student to feel a burning sensation or may get a headache and feel dizzy. This also affects the student to lack quality of sleep. The annoying smell can cause the students to feel gloomy and their mental health also will be affected. The majority of people especially students need a fresh area to do their things. By using our product morruscented candle, it will result in a smell of pleasing and relaxing odor. The mulberry smells purified the air in their room. This automatically enhances the mood of the students and boosts their dopamine hormone to feel pleasure.

METHODOLOGY

After doing a numerous test, research, and also some guidelines from our teacher, we have perfectly finished the procedure for our product. Firstly, we weigh 50 grams of beeswax and put it into a container. Then, we melt the beeswax in the pot using the stoves. After that, add 2 tablespoon of essential oil to the wax that was completely melted, stirred until they are well blended. We let it cool for about 15 minutes and we put the pot on a tray that filled with water to speed up the cooling process. Lastly, mix the beeswax with an extract colour of mulberry decoration.

CAUTION:

Always make sure that the fire is not too strong and do not melt the beeswax too long with a high intensity fire.

INGREDIENTS

- ï Dry mulberry fruit
- ï Essential oil
- ï Natural beeswax
- ï Extract colour mulberry

PROCESS

After measuring all of the ingredients, we pour in the extract colour mulberry in the melted wax. Note you have to stir it continuously as it is going to form some bubble in the solution. If you not stir it well, the formed bubble may rise up and spill all around on the stoves. It may cause the fire to burn the bubble and create mass. After the solution mix well, pour the essential oil with a spoon, stir mixture slowly until it mix up. After stirring for a couple of minutes, cool the solution on a tray that filled with water. Then stir the wax and pour it in a glass container to have a marble effect as decoration. After that, we punch a hole using chopstick in the wax and put the candle wick into it. lastly furnish the product by put some dry mulberries on the wax.

RESULT

The result we get are scented wax substance that help to freshen up the air in our home and room. It is also give us a relaxing vibe by its aroma.

DISCUSSION AND DECISION

It is clear that our products effectively in freshen up air. Our product also cheap to make and cheap to buy. Some scented wax in the market cost Rm 25 to rm 30 a bottle which is far more expensive then our product that cost just rm 8.00. although it is cheap to make, mulberry is not commonly found in the local stores. If you do want to make scented wax like our product. You do have to buy mulberry online. Which take some time to arrive.

REFERENCES

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e ISBN 978-967-2948-56-8

