

2ND EDITION

E-EXTENDED
ABSTRACT

**INTERNATIONAL
AGROTECHNOLOGY
INNOVATION
SYMPOSIUM (i-AIS)**



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INTERNATIONAL AGROTECHNOLOGY INNOVATION SYMPOSIUM (i-AIS)

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ABOUT FACULTY OF PLANTATION AND AGROTECHNOLOGY

The Faculty of Plantation and Agrotechnology was established in 2010 at Universiti Teknologi MARA (UiTM). The mission of the faculty is to play the vital role of producing well-trained professionals in all areas of plantation and agriculture-related industries at national and international levels.

Bachelor of Science (Hons) Plantation Technology and Management is a three-year program that strongly emphasizes the various aspects of Production Technology, Management, and Information Technology highly sought after by the agricultural and plantation sectors. Students in this program will be fully trained to serve as professionals in the plantation sector and related industries. They will have ample opportunities to fulfill important positions in the plantation industry such as plantation executives. This program provides a strong balance of technology and management courses essential for the plantation industry such as management of plantation crops, soil fertility, plantation management operation, plantation crop mechanization, and agricultural precision. As an integral part of the program, students will be required to undergo industrial attachment to gain managerial skills in the plantation industry.

The faculty is highly committed to disseminating, imparting, and fostering intellectual development and research to meet the changing needs of the plantation and agriculture sectors. With this regard, numerous undergraduate and postgraduate programs have been offered by the government's intention to produce professionals and entrepreneurs who are knowledgeable and highly skilled in the plantation, agriculture, and agrotechnology sectors.

PREFACE

International Agrotechnology Innovation Symposium (i-AIS) is a platform to be formed for students/lecturers/staff to share creativity in applying the knowledge that is related to the world of Agrotechnology in the form of posters. This virtual poster competition takes place on the 1st of December 2022 and ends on the 8th of January 2023. This competition is an assessment of students in determining the level of understanding, creativity, and group work for the subject related to agrotechnology and being able to apply it to the field of Agrotechnology. The i-AIS 2022 program takes place from December 1, 2022, to January 8, 2023. The program was officiated by the Dean of the Faculty of Plantation and Agrotechnology, namely Prof. Madya Ts. Dr. Azma Yusuf. The program involves students from faculties of the Faculty of Plantation and Agrotechnology (FPA) and HEP participating in i-AIS 2022, namely, the Faculty of Education and Pre-Higher Education. This program involves the UiTM student and some of the non-UiTM students which come from the international university and the local university. Two categories are contested, namely UiTM and non-UiTM. To date, students from these programs have shown remarkable achievements in academic performance and participation in national as well as international competitions.

This competition is an open door for the students and lecturers to exhibit creative minds stemming from curiosity. Several e-content projects have been evaluated by esteemed judges and that has led to the birth of this E-Poster Book. Ideas and novelties are celebrated, and participants are applauded for displaying ingenious minds in their ideas.

It is hoped that such an effort continues to breed so that there is always an outlet for these creative minds to grow.

Thank you.

Dean
On behalf of the Organizing Committee
Conference Chair
Universiti Teknologi MARA
Faculty of Plantation and Agrotechnology
<http://fpa.uitm.edu.my>

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GLUTINOUS RICE BALL FILLED WITH BANANA AND CHOCOLATE AND COATED WITH NUTS

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ABSTRACT - The traditional Indonesian snack known as Klepon / “Buah Melaka” has gained popularity throughout south- east Asia. According to tradition, glutinous rice flour—one of the most important and fundamental components of the majority of Indonesia's traditional snacks is typically used to make Klepon/ “Buah Melaka”. Therefore, the purpose of this study is to progress and improve Klepon / “Buah Melaka” by changing the ingredients in the expectation that it would increase the product's attractiveness. The modification done is by incorporating the glutinous rice ball filled with banana and chocolate coated with nuts. To see the success outcome of this research, we made several experiments using different ratios and measurements of the ingredients. The method of data collection used here by making questionnaire feedback from people around us.

Keywords: glutinous rice ball, food innovation

INTRODUCTION

From the study, with the technology and knowledge many products can be create. There are lots of products that has been produce for example the glutinous rice flour that have use in made the glutinous rice ball filled with banana chocolate and coated with nuts. The glutinous rice flour was made from cooked glutinous rice, dehydrated (dried the glutinous rice) and lastly, grind the rice until it is becoming the flour. Other than that, for the glutinous rice balls also mixed with the rice flour and the process of rice flour is wash the uncooked rice, dried it and then start to grind it. The flours have their own taste and has lot of benefits such as carries vitamins B and D including potassium and phosphorus that good for bone and increase the metabolism. Besides, banana and chocolate that use as the filling also have their own benefits and also the nuts coating. For the banana, they rich in nutrients that can improve the blood sugar levels and can help digestion system. Next, the usage of chocolate that has undergo the process from the cocoa beans. From the study also we can represent a proof of the low-cost concept. In making this product it does not involve the huge amount, it means from the small cost we can create the food from the ingredients that easy to find. It is also containing varieties flavours and the flavours dance in the mouth. It is also had high potential in market. It can be the general food like Onde-Onde. It also can enhance the food production and innovation. This product will be beyond of people expectations.

MATERIAL AND METHOD

The first process of making the glutinous rice ball filled with banana and chocolate and coated with nuts. This is done by mixing glutinous rice flour, rice flour, water, salt and also add a little yellow food colouring. The dough is shaped like balls and filled with bananas and chocolate. Both of the filling is cut into small pieces. After the filling process is complete, the next step is the process of boiling the glutinous rice ball at a high temperature. Once cooked or the glutinous rice ball is cook, it will float indicating that the glutinous rice ball has well-cooked. Lastly, the glutinous rice ball is served with coating them with nuts.

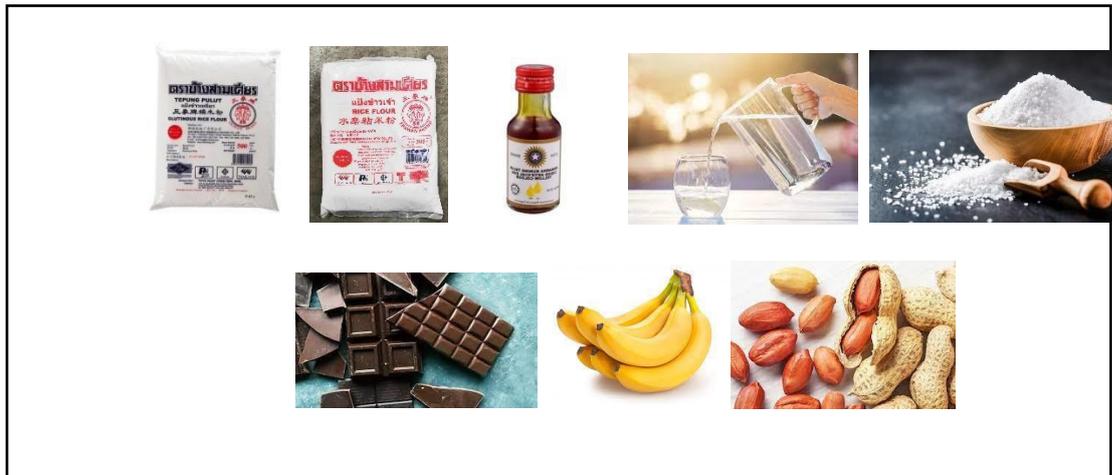


Figure 1

1. RESULTS & DISCUSSION

According to the products outcome, most of the people that answers our questionnaire like our products. The glutinous rice ball taste is very delicious. The texture also chewy and the thickness of the rice ball it is not consistent and it should be improved. The filling of banana and chocolate is bombastic because the taste can match and mixed perfectly. The last dressing of the glutinous rice ball that coated with nuts make it taste like we eat the Ferrero Rocher chocolate ball. When we bite, we can taste the melt banana and chocolate and the crunchy of nuts. It can be the dessert for any occasions or for hi-tea.

Based on the results, we can create new food just by use the items that was in the kitchen. The products were easily made. This food innovation follows the food sustainability. Basically, the Onde-Onde filling is made from the palm sugar and coated with shredded coconut but we change it. The purpose is to make the variety food and always come up with new idea, so the food industry is not boring with the same food. When our glutinous rice ball expose, we can make it trending so we can make everyone tries our new idea. In addition, the technology of food has helped people many things. For example, the food can be commercialized after we show to the people and can gain high demand.

2. CONCLUSION

As a conclusion, Traditional Malay kuih may grow in the market, both locally and worldwide, with the correct modernization and industrialisation adaption. The initial step must be taken in order for the subsequent ones to flow naturally. Since a clear differentiation strategy has been made, a promotion for public awareness should be launched. This would maintain the national identity and give traditional Malay kuih increased growth and importance in the marketplace. The rehabilitation of traditional Malay kuih must be properly planned and carried out in order to achieve the cultural sustainability.



Figure 2: The outcomes of our Glutinous Rice Ball Filled with Banana and Chocolate and Coated with Nuts

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