RESEARCH AND DEVELOPMENT FINAL PROJECT COOKIES SORGUM



BY Christian Wiraguna 2074130010010

STUDY PROGRAM OF CULINARY ART
OTTIMMO INTERNATIONAL
MASTERGOURMET ACADEMY
SURABAYA
2022

PLAGIARISM STATEMENT

I certify that this assignment/report is my own work, based on my personal study and/or research and that I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of document, electronic or personal communications. I also certify that this assignment/report has not previously been submitted for assessment in any other unit, except where specific permission has been granted from all unit coordinators involved, or at any other time in this unit, and that I have not copied in part or whole otherwise plagiarized the work of other students and/or person.

On this statement, I am ready to bear the risk/any sanctions imposed to me in accordance with applicable regulations. If in the future there is a breach of scientific ethics, or you have a claim against the authenticity of my work.

Surabaya, 17th March 2023

PHOTOLOGICAL PROPERTY OF THE P

Christian Wiraguna

APPROVAL 1

CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT PROJECT

This paper is approved by:

Name

Christian Wiraguna

Place, Date of Birth

Surabaya, 2 Januari 2002

NIM

2074130010010

Study Program

D3 Seni Kuliner

TITLE

Cookies Sorgum

Head of culinary Arts Study Program,

Date: 17th March 2023

Advisor,

Date: 17th March 2023

Heni Adhianata, S.T.P., M.Sc

NIP: 19691029 2002 072

Novi Indah Permata Sari, S.T., M,Sc

NIP: 19940225 2002 070

Director of

Akademi Kuliner dan Patiseri OTTIMMO International

Date 17th March 2023

APPROVAL 2

(CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT TITLE)

Culinary Innovation and New Product Development report by:

CHRISTIAN WIRAGUNA

2074130010010

This report is already presented and Pass the exam on : 10^{th} February 2023

Examiners:

Examiner 1 : Novi Indah Permata Sari, S. T., M.Sc

Examiner 2 : Jessica Hartan, A.Md.Par.

Examiner 3 : Arya Putra Sundjaja, S.E.

PREFACE

First of all, I want thanks to Jesus for letting me complete this RnD report and thank you for gave me new idea to make this product and, I want to thanks to my family always supporting me. The goals in this project is letting student improve their skill and create new product with their imagination. I hope this product will go international and everybody likes it.

Me as writer, I got a lot of support and instructions for completing this RnD report and I want to thanks to:

- 1. My parents because they always supporting me
- 2. Ms. Lathifatur Rahmah as my mentor
- 3. Ms. Hilda Tjahjani Iskandar as the Head of study Program at Ottimmo International Master Gourmet Academy.
- 4. Mr. Zaldy Iskandar as the Head Director of Ottimmo International Master Gourmet Academy.
- 5. My friend Darell Raditya, Cecilia Thiara and Kenta Bertu thank you for supporting me.

Surabaya, 17th March 2023

Christian Wiraguna

EXECUTIVE SUMMARY

Sorgum was a Indonesian cereal seed, like a corn is tall plant and this plant is from africa. Sorgum usually used to make syrup but I making this sorgum seed into flour and brown sugar, and make something new from their flour and brown sugar I want to make something new with this sorgum seed. This is why I used sorgum for my RnD.in the sorgum brown sugar have a *sucrose*, *glucose*, *fructose*, and *maltose*, and in the sorgum flour have a high *fiber*.

In this RnD project I want to used Jack Fruit Rags for a chocochip substitute and this Jack Fruit Rags I will dry it with food dehydrator, I want make something new and I want process this waste into new condiment for my cookies.

Keywords: Sorgum, Flour, Brown Sugar, Jack Fruit Rags

TABLE OF CONTENT

PLAGIARISM STATEMENTi
APPROVAL 1ii
APPROVAL 2iii
PREFACEiv
EXECUTIVE SUMMARYv
TABLE OF CONTENTvi
LIST OF FIGURESviii
LIST OF TABLEix
CHAPTER 1
1.1 BACKGROUND OF THE STUDY1
1.2 THE OBJECTIVES OF THE STUDY2
CHAPTER 2
2.1 DESCRIPTION OF THE INGRIDIENTS TO BE USED3
2.2 DESCRIPTION OF THE UTENSIL
2.3 APPROVED AND REVISED RECIPE9
2.4 PRODUCT PROCESSING SEQUENCE FLOWCHART12
2.5 PRODUCT PROCESSING METHOD14
CHAPTER 3
3.1 NUTRITIONAL FACT OF THE FINISHED PRODUCT17
3.2 FOOD SAFETY19
CHAPTER 4
4.1 PRODUCT COST21
4.2 PRODUCT SELLING PRICE
4.3 PRODUCT COMPETITIVE ADVANTAGE24
CHAPTER 5
5.1 GENERAL SUMMARY OF THE END PRODUCT25

5.2 SUGGESTIONS FOR FUTHER DEVELOPMENT	25
5.3 BENEFITS OF THE STUDY	25
BIBLIOGRAPHY	26
APPENDIX	27

LIST OF FIGURES

Figure 1. Sorghum Flour	.3
Figure 2. All Purpose Flour.	.3
Figure 3. Sorghum Brown Sugar	.3
Figure 4. Butter	.4
Figure 5. Xantham Gum	
Figure 6. Salt	
Figure 7. Cinammon Powder	.5
Figure 8. Egg.	.5
Figure 9. Baking Soda	.5
Figure 10. Vanilla Extract	.6
Figure 11. Gastronom6	.6
Figure 12. Spatula	.6
Figure 13. Scales	
Figure 14. Sauce Pan	.7
Figure 15. Oven	.7
Figure 16. Food Dehydrator	8.
Figure 17. Tray	
Figure 18. Stove	8.
Figure 19. Completed Recipe	.9
Figure 20. Completed Recipe	.10
Figure 21. Making cookies sorghum	.12
Figure 22. Making Dehydrated Jack Fruit Rags	.13
Figure 23. Process 1	.14
Figure 24. Process 2	.14
Figure 25. Process 3	.14
Figure 26. Process 4	.15
Figure 27. Process 5	
Figure 28. Process 6	.15
Figure 29. Process 7	.16
Figure 30. Process 8	.16
Figure 31. Process 9	.16
Figure 32. Nutrition Facts	.18
Figure 33. Packaging.	.19
Figure 34. Logo	.20
Figure 35. Recipe Title	.27
Figure 36. Approved Recipe	.28
Figure 37. Approved Sensory	.29

LIST OF TABLE

Table 1. Nutritional Content of Cookie Sorghum	2
Table 2. Nutrition Fact	
Table 3. Product Cost	21
Table 4. Fixed Cost	22
Table 5. Overhead Cost	22
Table 6. Start Up Cost	22
Table 7. Cost of Production	