# REASEARCH AND DEVELOPMENT FINAL PROJECT BANANA STEM OTAK-OTAK



# BY HILMI TIKO ALHARITS 207413001007

STUDY PROGRAM OF CULINARY ART
OTTIMMO INTERNATIONAL
MASTERGOURMET ACADEMY
SURABAYA

2022

#### PLAGIARSM 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 communication. 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 or otherwise plagiarized the work of other students and/or person.

With 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 there is a claim against the authenticity of my work.

Surabaya, January 9th 2023



Hilmi Tiko Alharits

#### APPROVAL 1

### CULINARY INNOVATION AND NEW PRODUCT DEVELOPMENT

#### **PROJECT**

Name

: Hilmi Tiko Alharits

Place, Date of Birth

: Sidoarjo, 12 April 2002

NIM

: 2074130010074

Study Program

: D3 Seni Kuliner

TITLE

: Vegetarian Otak-otak (Fish Cake)

from Banana Stem

#### This paper is approved by:

Head of Culinary Arts Study Program

Advisor,

Date: January 9th 2023

Date: January 9th 2023

Hilda Tirbiani L. S.E., Ak., C.A., M.M.

Michael Valen, A.Md. Par.

NIP. 19691029 2002 072

NIP. 19950219 2001 074

Director of

Akademi Kuliner dan Patiseri OTTIMMO Internasional

Date: January 9th 2023

025 1201 001

## **APPROVAL 2**

### Banana Stem Otak-otak

Culinary Innovation and New Product Development report by:

# HILMI TIKO ALHARITS 2074130010074

This report is already presented and Pass the Exam on :

13 December 2022

Examiners:

Examiner 1 : Michael Valent, A.md. Par.

Examiner 2 : Yudianto Oentario, S.E., M.M

Examiner 3 : Hilda Tjahjani Iskandar, S.E., Ak.,

C.a.,M.M

#### **PREFACE**

As for the beginning, I would like to praise and thank God the Almighty for the blessings of his grace and spiritual guidance for me to complete this Research and Development report. The main purpose of this report is to help each student in Ottimmo International to be creative and innovative as we have to create a new product that has never been in Indonesia or the world. The reasons why I come up with the idea of making Otak-otak or fish cake are because I think a lot of people really like to eat otak-otak as a snack or side dish to eat rice, then I realize there is vegetarian fish cake that made from tofu. So I create the new variant of otak-otak with different ingriedients and new experience to eat otak-otak but not forget with good nutrition content.

During the process of completing this report, I received so much guidance and support. By this I would like to express my gratitude to the name below:

- 1. Mr. Michael Valent as my Advisor who always support and give me input about my idea
- 2. Ms. Nurul Azizah as my Lecture and helped me to find the idea for the product I made.
- Ms. Hilda Tjahjani Iskandar as the Head of Study Program at Ottimmo International.
- 4. Mr. Zaldy Iskandar as the Head Director of Ottimmo International
- My Lovely Parents who always supported me and advise me to finish my Research and Development as soon as possible
- 6. My Dearest Friends who always support me and give a lot of suggestion

Surabaya, January 9th 2023

Hilmi Tiko Alharits

**EXECUTIVE SUMMARY** 

Banana is the general name given to large herbaceous plants with large,

elongated leaves that grow directly from the stem. Banana stems are soft because

they are formed from a layer of soft and long midrib. It turns out that banana stems

are edible and I chose this material for my RnD.

Otak-otak is a food made from minced mackerel wrapped in banana leaves,

grilled. In my RnD I will make otak-otak that made from banana Stem. Banana

stem Otak-otak is basically a vegetarian dish that made from garden waste. Banana

stem can be eaten after process it properly. Banana stems are usually thrown away

or even left to rot, therefore I want to make food made from banana stems that are

delicious but also contains nutrients that are good for the body such as

carbohydrates, protein and rich in phosphorus, minerals, potassium, calcium, iron.

Keyword: Otak-otak, Banana Stem.

٧

# TABLE OF CONTENT

Plagiarism Statement	i
Approval 1	ii
Approval 2	iii
Preface	iv
Executive Summary	V
Table Of Content	vi
List Of Table	viii
List Of Figures	ix
Chapter 1	1
1.1 Background Of The Study	1
1.2 Objective Of The Study	2
Chapter 2	3
2.1 Description Of The Material To Be Used	3
2.2 The Tools Used During The Processing	10
2.3 Approve And Revised Recipe	16
2.4 Product Processing Sequence Using Flow Chart	20
2.5 Product Processing Method With Picture	23
Chapter 3	29
3.1 Nutritional Fact Of The Finish Product	29
3.2 Food Safety	32
Chapter 4	35
4.1 Product Cost	35
4.2 Selling Price	37
Chapter 5	40
5.1 Conclution	40
5.2 Suggestion	40
5.3 Benefit Of The Study	41
Ribliography	42

Appendix43
------------

# LIST OF TABLE

Table 1 Nutritional Fact Table	29	
Table 2 Production Cost Table	35	
Table 3 Food Fixed Cost Table	36	
Table 4 Overhead Cost Table	36	
Table 5 Start Up Cost Table	36	
Table 6 Cost Of Production Table	37	

# LIST OF FIGURE

Figure 1. Material for The Otak-otak
Figure 2 .Oyster Mushroom
Figure 3. Salt
Figure 4. Sagu Flour
Figure 5. Egg White
Figure 6. Garlic
Figure 7. Shallot6
Figure 8. Pepper6
Figure 9. Coriander
Figure 10. Chilli
Figure 11. Coconut Milk
Figure 12. Coconut Flakes
Figure 13. Scallion 9
Figure 14. Bread Crumbs
Figure 15. Pot
Figure 16. Steamer 10
Figure 17. Food Processor
Figure 18. Cutting Board
Figure 19. Knife 12
Figure 20. Bowl 12
Figure 21. Spoon
Figure 22. Spatula 13
Figure 23. Tongs 12
Figure 24. Pan.
Figure 25. Scale
Figure 26. Cooling Tray
Figure 27. Completed Recipe
Figure 28. Flowchart Of Processing Otak-otak
Figure 29 . Flowchart Of Processing Ground Spice

Figure 30 . Flowchart Of Processing Banana Stem Otak-Otak	22
Figure 31. Banana Stem Slices	23
Figure 32 . Cleaning Banana Stem From Sap	23
Figure 33. Boiling Banana Stem	24
Figure 34. Chop The Mushroom	24
Figure 35. Blend The Banana Stem	25
Figure 36. Blend The Spices	25
Figure 37. Put Banana Stem And Spice In Bowl	26
Figure 38. Banana Stem Mixture	26
Figure 39. Roll The Mixture In Banana Leaf	27
Figure 40. Steam The Otak-otak	27
Figure 41. Cool The Steamed Otak-otak	28
Figure 42. Grill The Otak-otak	28
Figure 43. Nutritional Table	31
Figure 44. Packaging Box	33
Figure 45. Food Label	34