

CHAPTER III

METHODS

3.1 Time and Place

Culinary innovation and Product development was done from March to June 2023 at baking and pastry kitchen, Ottimmo International.

3.2 Ingredients and Utensils

3.2.1 Ingredients

The ingredients and functions used in this study presented in the table 3.1

Table 3.1 Ingredients for cereal

No	Ingredients	Quantity	Function
1	Purple sweet potatoes	100 g	Cereal base
2	Miana leaves powder	5 g	Antioxidant source addition
3	Tapioca starch	50 g	Cereal base
4	Margarine	10 g	Enhance texture
5	Honey	30 g	Sweetener
6	Baking powder	0.5 g	Leavener
7	Water	25 g	Binding agent

1. Ingredients for miana powder :
 - Miana leaves 50 g
2. Ingredients for cereal with purple sweet potatoes and miana leaves :
 - Purple sweet potatoes 100 g
 - Miana leaves powder 5 g
 - Tapioca starch 50 g
 - Margarine 10 g
 - Honey 30 g
 - Baking powder 0.5 g
 - Water 25 g

3.2.2 Utensil

The utensils and functions used in this study presented in the table 3.2

Table 3.2 Utensils for Cereal

No	Utensil	Function
1	Dehydrator	Dehydrate the miana leaves and cereal
2	Mesh 80	Sift the miana leaves
3	Mixing bowl	Mix the cereal dough
4	Steamer	Steam the purple sweet potatoes
5	Grinder	Grind the miana leaves
6	Digital scale	Measure the ingredient weight
7	Peeler	Peel the purple yam
8	Spoon	Mixing the cereal dough
9	Fork	Mashed the purple sweet potatoes

3.3 Processing Methods

The processing method of this study are presented below :

1. Wash the miana leaves with running water until the dirt came off, make sure the leaves is clean.

2. Dry the leaves with tissue or air dry, and then dehydrated the miana leaves at 40°C for 36 hours in dehydrator.
3. Grind the miana leaves with grinder until smooth.
4. Then sift the miana leaves with mesh 80 after that the remaining miana leaves have to get grinded again until all off the miana leaves can be sifted by mesh 80.
5. Peel the purple sweet potatoes using peeler until all the skin of the purple yam came off.
6. Steam the purple sweet potatoes until soften and can be it can be easily stabbed by fork.
7. Mash the purple sweet potatoes using fork until all off the purple yam get mashed and smooth.
8. Mix the dry ingredients such as miana leaves powder, tapioca starch, and baking powder.
9. After that pour in the water, honey, and margarine into the mixture while mixing.
10. And then add the purple sweet potatoes and mix well using the spoon.
11. Shape the cereal dough into the the desired shape.
12. Dehydrated the cereal in dehydrator at 45°C for 24 hours.
13. Fry the cereal with hot sand and the cereal can be served.

3.4 Flow Chart

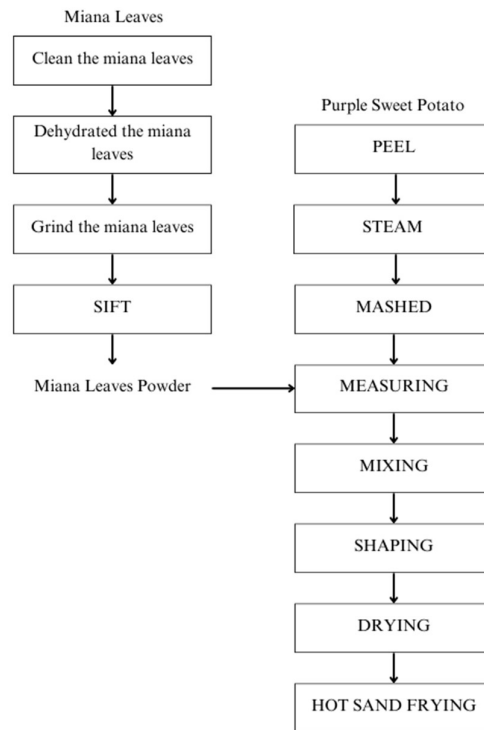


Figure 3.2 Flow Chart Cereal Purple Sweet Potato and Miana Leaves