

CHAPTER III

METHODS

3.1. Time and Place

Culinary innovation and Product development was done from March to may 2023 at my home jalan puri widya kencana k2 no 5

3.2. Ingredients and Utensils

3.2.1 Ingredients

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

Tabel 3. 1 Ingredirnts for Beer

No	Ingredients	Quantity	Function
1	Nutmag flesh	500 g	aroma and taste enhancer
2	Berley seeds	1kg	Main ingredients of sugar source
3	Yeast	5 g	Fermentation
4	Water	6 L	Dissolving barley
5	Hop pellets	18 g	aroma and taste enhancer
6	sugar	126g	helps the fermentation process

3.2.2 Utensils

The utensils and functions used in this study in table 3.2

Tabel 3. 2 Utensils for Beer

No	Utensils	Funcutions
1	Fermented glass jar	Early fermentation container
2	Digital thermometer	Measuring water temperature
3	Stella san Sanitizer	Tool setril

4	Fermentation airlock	Fermentation gas drain
5	Glass bottle 1L	Final fermentation container
6	Food Grade Nylon Filter	Separating barley seeds
7	Scales	Weighing materials
8	Hand glove	Protect hands and keep them sterile
9	Stock pot	Boiling container
10	Hose filter	Sift barley seed pulp
11	Liquid siphon hose	Helps transfer liquid to the final fermentation bottle
12	Alcohol tester	Measuring alcohol
13	Wooden spatula	Mixer

3.3 Processing Methods

1. Heat 6 liters of water to a temperature of 160°C
2. Crush all the grains (not in the powder/ flour) but into grits.
3. Next, coat the surface of the pan using a filter cloth and then put the grains into the water, Then stirred until nothing coagulates and cooked for 1 hour.
4. After 1 hour remove the seeds by lifting the filter cloth and let it drip until it runs out, then cook again about 45 minutes.
5. Next in the first 15 minutes add hops pellets into the wort and mix again.
6. After 45 minutes remove and cool the wort by putting water in the sink and filling it with cold water so as to lower the temperature of the wort.
7. Before carrying out the next process in this section, the tools used must be sterilized!
8. After that the wort can be put into a closed container and given yeast then stirred until well mixed, and let stand for about 14 days with room temperature 65°C.
9. After the 7th day, the ripe nutmeg is washed and then peeled and cut into small parts

10. The next step is to heat nutmeg meat on a waterbath to kill all bacteria, then put nutmeg meat into a cloth filter that has been previously sterilized.
11. hat nutmeg meat is heated on a waterbath to kill all bacteria, then put nutmeg meat into a cloth filter that was previously sterilized.
12. The next step is to put nutmeg into a container containing beer and close tightly then left again for 7 days.
13. After day 14, heat the water and sugar and cook until all the sugar dissolves.
14. Then the beer container can be opened and then the nutmeg flesh is removed and then mix sugar water into the beer.
15. Next, put the beer into a glass bottle that has been sterilized and tightly closed
16. Beer with nutmeg flavor ready to serve.

3.4 Flow Chart

The flowchart of processing method is presented in figure 3.1

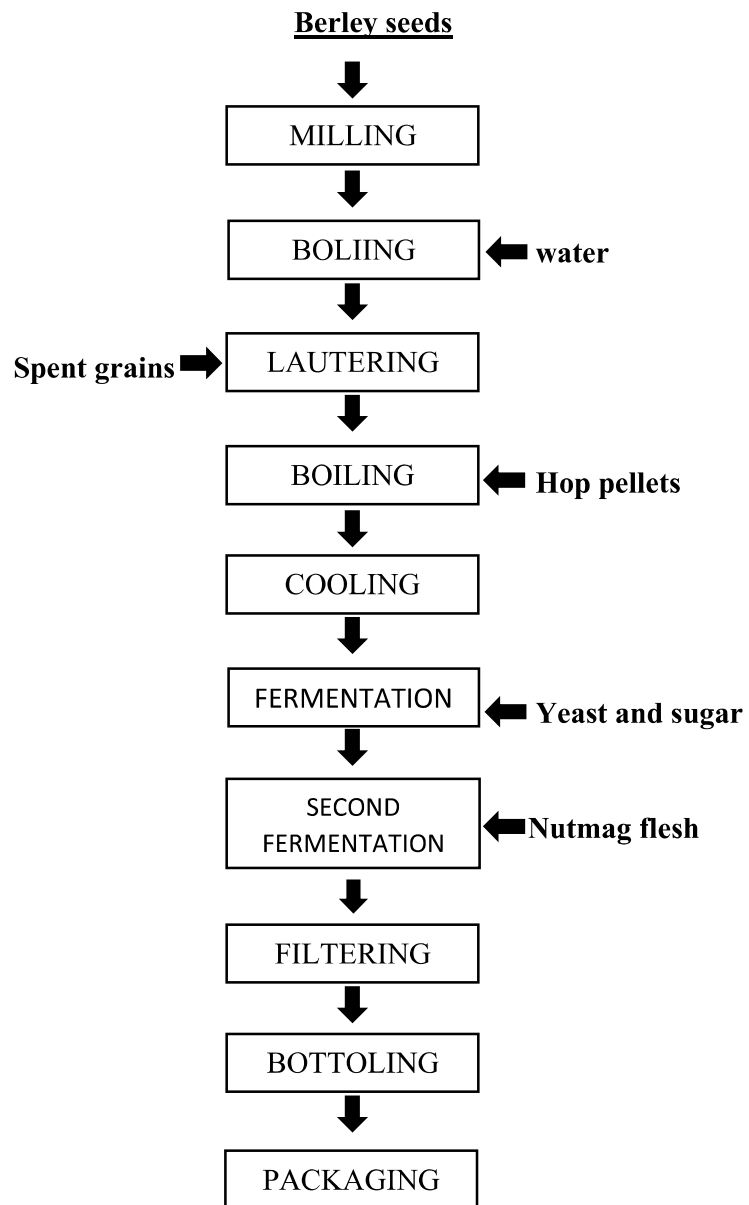


Figure 3. 1 Flowchart fermentation beer