

## Chapter II – Ingredients and Utensils Overview

### 2.1. Etlingera elatior craft

Etlingera elatior craft is a vinegar made from E.Elatior flower petals. The petals is blendered until smooth and then incorporated with water, sugar, *S.cerevisiae* starter , and *Acetobacter aceti* starter and left on a dark place for 3-4 months in total. The perfume added by the E.Elatior flower is working well with the vinegar, while it's not very strong to our smell but still add a nice subtle aroma to our nose.

The processes of making crackers are environmentally friendly and using non-chemical ingredients, without the chemical ones that are not good for human health.

The finished product contain a high anti-microbacterial and anti-oxidant that are very important for our health, whether we use it as a ingredient for our food or use it as a cleaning agent for our utensils. The acidity level of this vinegar could also start up our body metabolism in the morning where it's still slow and sluggies.

### 2.2. Description of the material used

#### 1. Etlingera elatior flower petals

The main ingredient of Elatior craft.



Picture 1. Etlingera elatior flower with stem on.

(anonymous <sup>1</sup>, 2016)

2. Granulated sugar

Used to feed the yeast.



Picture 2. Granulated sugar.

(anonymous <sup>2</sup> 2015)

3. *S.cerevisiae* (yeast)

Yeast used to boost the fermentation process.



Picture 3. Yeast

(anonymous <sup>3</sup> 2010)

4. *Acerobacter aceti* bacteria starter

Used to speed up the fermentation process.



Picture 4. Mother vinegar

(anonymous <sup>4</sup> 2015)

## 5. Mineral water

Used in fermenting process



Picture 5. Mineral water  
(anonymous <sup>5</sup> 2018)

### 2.3. The tool used during the processing

#### 1. Sauce pan

The sauce pan is used to exterminate bacteria that might be present on the bottle to package our vinegar. The material used for this 30 cm diameter sauce pan is aluminium coated with anti-stick agent.



Picture 6. Anti-stick pan  
(anonymous <sup>6</sup> 2012)

## 2. Blender

The Blender here is used to blend the E.Elatior flower with water to maximize its flavor and extraction. the height of the blender tube itself is 18 cm and is made of glass.



Picture 7. Blender

(anonymous 7 2012)

## 3. Glass bottle

The glass bottle is used as a storage to ferment the vinegar and as a packaging. The bottle can store up to 250 ml of liquid.



Picture 8. Glass bottle

(private document 1)

#### 4. Cheesecloth

Around 8 x 8 cm cheesecloth is used to cover the glass bottle's mouth to help the fermentation of the vinegar.



Picture 9. Cheesecloth

(anonymous <sup>8</sup> 2014)

#### 5. Wooden spoon

Wooden spoon is used to stir the vinegar blend while it's fermenting. The use of other material like plastic or stainless steel could damage the vinegar.



Wooden spoon

(anonymous <sup>8</sup> 2014)

#### 6. Sieve



picture 11. Sieve

(anonymous <sup>9</sup> 2013)

The sieve is used to remove the E. coli remainings from the vinegar.

7. Rubber band

Is used to bind the cheesecloth onto the mouth of the bottle.



Picture 12. Rubber band  
(anonymous <sup>10</sup> 2014)

8. Stove

The stove is used to heat the saucepan



Picture 13. Stove  
(anonymous <sup>11</sup> 2016)