

CHAPTER I

INTRODUCTION

1.1 Background of The Study

Banana plant (*Musa acuminata*) is really familiar to all people. All part of banana plant can be used by people to make a product or even have medical applicants: the flowers in dysentery; cooked flowers in diabetics; young leaves as poultices on burns; the roots in digestive disorder. Banana as fruit or vegetables can be used as complementary ingredient or even directly consume. (*Vishal Sharma, 2019*). Banana leaves can act as traditional food wrap. The residues of banana tree can be used as pulp for paper and combustible.

Banana flower, which may called banana blossom or banana heart is a large, dark-purple blossom which grows on the tip of a banana bunch on the end of the stem holding a cluster of banana. In most tropical countries, banana blossoms are used as vegetable either raw or cooked which only the tendon core is sliced and eaten. Banana blossom has a huge nutritional value and healthy benefits. (*Vishal Sharma, 2019*). It represent a valuable source of potassium, vitamin A, C, E, minerals, fatty acid content, flavonoids, saponin, essential and non-essential amino acid, tannins, glycoside, and steroid.

Besides, banana flower also contents of 9.9 grams of carbohydrate, 5.7 grams of fiber, 1.6 grams of protein, 0.6 gram of fat per 100 grams. (*Afifah Novitasari, 2013*). Banana blossom serves the health benefits; curing infections; overcoming diabetes and anemia; weight loss; rich source of vitamins and minerals; healthy uterus.

Korean food is rich in color, bold flavors, fermentation, and taste. The diversified color will arouse people's appetite greatly. As the symbol of Chinese cuisine, side dish like Kimchi is very important to be served along with other main dishes. The combination of flavors from kimchi and other side dish will enhance the flavor more. Making Kimchi only needs the vegetables, seasonings, sweeteners, porridge, and patience during fermentation process. (*Joan Raymond, 2021*)

Kimchi is often eaten as side dishes or even cooked in soups such as Kimchi Jjigae. Kimchi is also used in cooking main dishes such as Bimbimbap, Kimchi Bokkeumbap, Bibimmyeon, etc. Korean has lots of variations of Kimchi, almost every vegetables can be made into Kimchi, such as napa cabbage, cucumbers, radishes, scallions, carrots, garlic, etc.

Freshly made kimchi is not sour because there are no fermentation process happening yet. It takes at least 2 days to ferment the kimchi and makes it sour.

Product innovation is commonly regarded as a major success factor in aggressive and competitive food market. Product development process controlled with a sensory analysis for delivery of acceptable products to consumers is a strategy to reduce the risk of failure. Developing a successful new product requires a correct sensory evaluation and a complete understanding of an acceptance pattern of consumers.

In Indonesia, nowadays, Kimchi is getting more popular, since it's stated as one of the healthiest food in the world and because of the impact of K-dramas. However, banana blossom is commonly consumed as vegetable. By leveraging carbohydrate content of banana blossom which used to produce a development product of kimchi, offers consumers the alternative possibility to consume banana blossom.

Nutrition and Health Benefits (*Vishal Sharma, 2019*) :

- a) Reduce the risk of infections
- b) Supports menstrual wellness
- c) Helps control diabetes
- d) Averts cancer and heart diseases
- e) Improves lactation
- f) Slows aging process (anti-aging)
- g) Lowers blood pressure
- h) Supports digestive system wellness

Characteristics of KIM BA-SOM kimchi is tangy, spicy, and delicate texture. It depends on people's preference of tanginess, one could immediately consume it freshly fermented or even let it ferment longer in the fridge for extra-tangy flavor. (*Joan Raymond, 2021*). Once you eat the kimchi, you will taste the fresh tanginess and the delicate texture of banana blossom and finally some kick of spiciness.

KIM BA-SOM is a very good source of probiotics as the result of fermentation. Lactic acid bacteria (LAB) are heterogenous group of bacteria which plays a significant role in a variety of fermentation processes. (*Ming Sui, 2019*) They ferment food carbohydrates and produce lactic acid as the main product of fermentation. In addition, degradation of proteins and lipids and production of various alcohols, aldehydes, acids, esters and sulphur compounds

contribute to the specific flavour development in different fermented food products. The basic principle of kimchi fermentation is firstly the fermentation of lactic acid bacteria to vegetables, and the fermentation products with unique flavor; the second is to add salt, evenly penetrate into the inside of the vegetables, so that the water inside the tissue exudes and improve the quality; Third, through various physical and chemical processes in the fermentation process. The reaction produces a unique flavor, color, and texture of the kimchi product. (*Stanley E. 2019*). By artificial inoculation, lactic acid bacteria can be made into dominant bacteria, and the growth of bacteria is avoided. There are several potential health or nutritional benefits possible from some species of lactic acid bacteria. Among these are : improved nutritional value of food, control of intestinal infections, improved digestion of lactose, control of some types of cancer, and control of serum cholesterol levels.

1.2 Objective of The Study

The purposes of R&D new product are as follows:

1. To introduce KIM BA-SOM as an innovation substitute for Kimchi.
2. To understand the production method and marketing strategy of KIM BA-SOM.
3. To know the business prospect of KIM BA-SOM.
4. To ensure that KIM BA-SOM as a new innovation product can be accepted by consumers
5. To identify the efficient way to process and store banana blossom to make it last longer
6. To identify how to market the kimchi and the legal aspects that need to be obtained.