CHAPTER 1
INTRODUCTION

1.1 Background of The Study

The reason why author decided to make Kecombrang Crackers from fermented corncobs starch and tapioca flour is because kecombrang is one of the ingredients to add flavor to food (Rusanti, et al. 2017). In addition, kecombrang also has many benefits that have been proven in various studies such as antioxidants, antibacterials, and can be used as food preservatives. Kecombrang is one type of spice plant that has long been known and used by humans as medicines as a body odor remover and bad breath (Hidayat & Hutapea's 1991 study (as cited in Rusanti, et al., 2017). According to Hasbah et al., (2005) (as cited in Rusanti et al., 2017), the kecombrang plant can be used to treat diseases that are classified as severe, cancer and tumors.

Kecombrang is an Indonesian spice that comes from flowers, not only has a distinctive aroma and taste but also looks beautiful and exotic. These flower buds are sometimes added in cooking as an additional spice. Usually, people add kecombrang to pecel dishes, chili sauce or make vegetables. The distinctive aroma and taste make kecombrang offer its own taste sensation in cooking. Because kecombrang is not often used as the main ingredient, the idea arose to make kecombrang as the main ingredient in making crackers.

Then crackers are also one of the snacks that are very popular with the people of Indonesia. Crackers are a popular snack food, easy to make, a variety of colors and flavors, favored by all ages (Wahyuni's 2007 study (as cited in Putri, M.E, 2017)). The basic ingredient for making crackers is starch. The idea re-emerged

considering that the amount of agricultural waste such as corn cobs continues to increase. Based on data from the Polish Journal of Food & Nutrition, corn cobs are a high-fiber food containing lignin (15%), cellulose (45%), and hemicellulose (35%). In addition, corn cobs are safe for consumption because of their high fiber content, which allows them to heal wounds quickly and helps calm digestion, preventing constipation. It, on the other hand, has the power to cleanse the human system of all pollutants, thereby encouraging good health. And, without a doubt, healing diseases such as hypertension, diabetes, stroke, stomach ulcers, liver, and kidney disorders, as well as losing weight.

The addition of corncobs into fermented starch into tapioca flour eventually became the basic ingredient for making kecombrang crackers.

Nutrition and Health Benefits of Kecombrang:

1. Great antioxidants to soak free radical compounds (Syarif et al., 2016 (as cited in Sari, I.P., 2022)) to prevent cell/tissue damage, auto immune diseases, degenerative diseases to cancer.
2. Has anti-inflammatory, antihistamine (allergic), antimicroma, antifungal, anticancer, and antiviral properties (Fanda & Maruzy, 2016 (as cited in Sari, I.P., 2022)).
3. Antibacterial against Escherichia Coli and Bacilus Subtilis (Valianty, 2002 (as cited in Sari, I.P., 2022)).
4. High in calcium and minerals.

These kecombrang crackers are fried and have a slightly curved shape then wrapped in a standing pouch that has a seal to maintain the quality of the crackers. The Kecombrang Crackers has a characteristic salty, savory, crispy, and gluten free.

1.2 The Objectives of The Study

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

1. To introduce new products, Kecombrang Crackers are a different taste innovation compared to other crackers in general.
2. To reduce agricultural waste by utilizing corncobs.
3. To understand the production method of Kecombrang Crackers.
4. To ensure that Kecombrang Crackers as a new innovation product (gluten free) can be accepted by consumers.
5. To know about the nutritional facts of Kecombrang Crackers.
6. To identify the efficient way to process and store the Kecombrang Crackers to make it last longer.
7. Prepare costs and define price range for these products.