

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

In Indonesia, horticultural plants are generally used as food, primarily vegetables and fruits, while spices are used as cooking ingredients (Yulia, 2021). One of the plants that can be utilized is the kluwih fruit. Kluwih (*Artocarpus camansi*) is a type of hardwood tree with fruit that has a tough, spiky skin. The kluwih fruit resembles breadfruit but has seeds and more prominent spines on its skin (Setyawan, 2022). Arif et al., (2018) stated that the kluwih fruit is a type of plant or vegetable, and all parts of it, including the flowers, leaves, branches, stem, and roots, secrete sap. According to Sulistiyani (2014), kluwih fruit has many health benefits and is often used as a plant-based food ingredient. Besides its fruit, kluwih seeds can also be utilized. In this study, the seeds used are mature kluwih seeds, which are brown and have a slightly hard texture. This is because mature kluwih seeds have a higher carbohydrate content, at 52.7g, compared to young kluwih seeds, which contain 27.2g of carbohydrates (Salsabila et al., 2019).

As a local food source, kluwih fruit is still underutilized. The kluwih plant is widely found in Indonesia, particularly along the coast of Southwest Aceh. However, its potential has not been fully exploited by the local community. Kluwih fruit is generally used as a vegetable, while its seeds have not been optimally processed (Murdopo and Suhartatik, 2014; Nurliana and Rachmawati, 2023). According to data from the Blitar City Central Bureau of Statistics (2013), there are only four household horticultural businesses cultivating kluwih fruit. The number of managed trees reaches nine, with two already producing fruit. On average, the number of kluwih trees in this data set is two. The low number of kluwih trees planted is due to the lack of market demand. Yet, in Indonesia, kluwih trees can grow easily. Fadzilla (2018) stated

that young kluwih fruit can be directly processed as a vegetable, while mature kluwih fruit is usually harvested for its seeds, which are boiled, roasted, or steamed, and then consumed as snacks. Considering the underutilization of kluwih fruit and the limited processing of mature kluwih fruit, this study aims to create a new innovation using kluwih fruit as the main ingredient in the production of savory spread.

The flavors of spreads are very diverse, but generally, there are sweet spreads and savory spreads. Spreads are used to enhance the flavor or texture of foods. Common spreads include butter and soft cheeses. They are often found in the form of pastes, sweeteners, or liquids made from fruits, nuts, cheese, or yeast extract (Beeren et al., 2019). These types of foods are convenient for busy mornings. Breakfast spreads are typically applied to other food items such as bread, biscuits, pancakes, and waffles. Common spreads include fruit jams and jellies, chutney, dairy spreads (like cheese and spreadable cheese), edible oils (like butter and margarine), nut butters (like peanut, hazelnut, and almond), and yeast extract spreads (Sibi, 2022).

Rica-rica seasoning is a traditional Indonesian spice from Manado, known for its spicy flavor. The term "rica" comes from the Manado language, referring to the spicy bird's eye chili. This seasoning is characterized by its spicy and savory taste. In Manado, rica-rica seasoning is often used to prepare dishes such as chicken, meat, and fish as a complement to rice. The capsaicin content in the chili provides a strong spiciness to this seasoning, which can enhance appetite (Sari, 2017).

In the making of kluwih spread, the main focus will be on the distinctive savory and spicy flavors of rica-rica seasoning, one of Indonesia's culinary heritages rich in spices. This product will introduce a new spread flavor while showcasing authentic Indonesian spices. Besides offering a rich taste, this product also provides health benefits by using natural ingredients without preservatives and artificial colorings. The primary methods to be used in this product are steaming and blending.

## **1.2 Objectives of the Study**

The objectives of this study are following below:

1. Considering the current trend of creating healthy yet tasty foods, this study aims to develop a plant-based spread rich in nutrients using local resources, specifically kluwih.
2. To determine the acceptance of spread rich in nutrients from kluwih fruit with the flavor of rica-rica seasoning.
3. To assess the nutritional composition and explore the potential health benefits of the rica-rica kluwih spread.