

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Indonesia is a country rich in natural resources, including a wide variety of agricultural products that hold great potential for development into innovative food products. Cilembu sweet potato is one of the local commodities that is still primarily utilized for food products. This is a commodity that plays a strategic role in food diversification. This is related to its high nutritional content, minerals, and vitamins, as well as the growing variety of processed products and industries derived from Cilembu sweet potato.

Cilembu sweet potato (*Ipomoea batatas L.*) is a variety of sweet potato cultivated in Cilembu Village, Pamulihan District, Sumedang Regency, West Java Province. It is often referred to as “honey sweet potato” due to its naturally sweet flesh, which becomes more pronounced when roasted (Faridatul & Ma’aruf, 2022). Currently, the use of Cilembu sweet potatoes is still limited to simple food products such as fried balls and chips. There has been little innovation in processing it into liquid products like syrup. So far, the syrup made from purple sweet potato is the most commonly available and consumed on the market. However, developing syrup from this local ingredient presents a promising opportunity, given its distinctive sweet and aromatic flavor profile.

Flavor plays the most important role in sensory analysis, as it determines the acceptability of a product when marketed to the public. Flavor is a key attribute that influences an individual's acceptance of a product, as it will affect future consumer demand (Anggraeni et al., 2018). However, if only a small amount of extract is used, the characteristic taste of Cilembu sweet potato will be lost due to the dominant sweetness of the sugar. Conversely, if the sugar concentration is too high, it will overpower the taste of the Cilembu sweet potato. On the other hand, if too little sugar is used, the resulting syrup will

lack thickness and be more prone to spoilage, considering that sugar also functions as a natural preservative.

The development process of Cilembu sweet potato syrup involves extracting the sweet potato juice using a roasting technique to enhance its natural sweetness. The roasted flesh is then cooked into a puree, filtered, and mixed with simple syrup to create a final product that is appealing and has a good shelf life. Successful development of Cilembu sweet potato syrup is expected to contribute positively to increasing the added value of local products, expanding the variety of sweet potato-based food innovations, and promoting the growth of food industries based on local agricultural commodities.

1.2 Objectives of the Study

The objectives of this study are following below:

1. Introduce the potential of processing Cilembu sweet potatoes into consumable syrup, thereby expanding the variety of Cilembu-based products.
2. Determine the optimal formulation for producing Cilembu sweet potato syrup that is stable and suitable for consumption.
3. Evaluate the effectiveness of lemon juice as a natural preservative in extending the shelf life of the syrup.