

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Jam is one of the sweet foods that many people enjoy. Usually, it is used on bread or crackers or etc. Most jams are made using fruits containing natural pectin as their base ingredients. However, the researchers in this study aim to make something different by crafting jam using tea and plants. In this study the researchers using rosella and aloe vera as the base ingredients.

Indonesia is a country with a tropical climate. With this tropical climate, rosella can thrive. Rosella plants (*Hibiscus Sabdariffa L.*) are widely known because the calyxes of the rosella flower can be used as a health drink that can treat various diseases such as hypertension, diabetes, and diuretic (Patel, 2013). Rosella contains 128.76 mg/100 g of antioxidant. (Suzery et al., 2010). Antioxidant are molecules that can react with and neutralize free radicals. When there are more free radicals than the body's natural antioxidant can handle, oxidative stress can occur. Therefore, our bodies require antioxidant to help maintain our normal body defense mechanism (Titta et al., 2013).

Aloe vera is highly fertile plant when grown in tropical regions, making it easy to trade. Beside it is commercial viability, aloe vera also offers various benefit properties for our bodies. It contains several essential nutrients, including vitamins A, B₁, B₂, B₃, B₁₂, C, E, choline, inositol, and folic acid. It is mineral content includes calcium (Ca), magnesium (Mg), potassium (K), sodium (Na), iron (Fe), zinc (Zn), and chromium (Cr). Some of these vitamins and minerals serve as natural antioxidant agents, such as vitamin C, vitamin A, vitamin E, magnesium, and zinc (Purwaningsih, 2019).

Aloe vera also contains 57.64% dietary fiber in the flesh (Widiyati et al., 2023)

1.2 The Objectives of The Study

The purpose of creating this product is:

1. To utilize aloe vera as food, not just as a cosmetic or other beauty product.
2. To provide for individuals who want a quick breakfast or meal when they are short on time.
3. To make jam from ingredients that are highly beneficial and nutritious.
4. To raise awareness and popularity of rosella in Indonesia.