

# CHAPTER I

## INTRODUCTION

### 1.1 Background of Study

Indonesia is a tropical area with a wide variety of plants. Development efforts for medicinal plants are still being made. Limited material availability and insufficiently intensive plant cultivation are two challenges in the development of therapeutic plants. The cherry plant (*Muntingia calabura*) is one of the plants that has the potential to be developed as a medicinal plant. There is only one species of *Muntingia*, the cherry. Because of its low economic value and lack of understanding of its uses, cherry fruit usage is still not ideal. Many can be found at the side of the road, where they are frequently used as a shade. Because of its leaves and other parts, Kersen is one of the plants that could be useful. The fruit of this plant contains various bioactive components that are advantageous to health. According to several earlier studies, the cherry plant contains a variety of bioactive substances, including tannins, flavonoids, and saponins, which have antimicrobial, antioxidant, bacterial, and fungal properties. The substance also serves as an antioxidant, which can lessen free radicals (Nurholis & Saleh, 2019)

Wine is an alcoholic beverage made by fermenting grapes; there are different types of wine, including natural still wine, sparkling wine, fortified wine, and fragrant wine. Wine definition, wine is an alcoholic beverage produced from fermenting grapes. Wine typically contains 10 to 15 percent alcohol. The word "wine" is only used to refer to the type of beverage made from the fermentation of grapes, while other forms of fruit (such as apple) are used in this process and the word "wine" is added with the name of the fruit in front of it. It is a strawberry- and apple-fermented wine. Wine is a beverage produced through fermentation (fresh grape juice), and it can be prepared from strawberries, raisins, or rice (Wiratnaya *et al.*, 2019)

Few individuals are familiar with Kersen fruit. Kersen fruit is difficult to find because it is an uncommon fruit, and the plant grows in a limited number of locations. For this reason, Kersen fruit is used as a winemaking ingredient, with the expectation that the use of cherry fruit in Indonesia will be optimized.

## **1.2 Objective of The Study**

The objectives of this study are following below:

1. To maximize the optimal utilization of Indonesian indigenous local fruit; the Kersen fruit, which is only ingested raw as a fruit.
2. Introduce kersen fruit to Indonesian citizens who are still unfamiliar with this fruit, which is rich in antioxidants and other bioactive compounds. Invite Indonesians to partake in consuming and utilizing this fruit as a food raw material so that the fruit can reap the maximum benefits.
3. To be able to compete internationally and be marketed abroad, it is anticipated that local Indonesian fruit can become a new alternative material of comparable quality.