

CHAPTER I

INTRODUCTION

1.1 Background of Research

Indonesia is rich in traditional medicinal plants which have been used as a traditional medicine. Traditional medicine plants is expected to be utilized in the development of public health. The progress of modern knowledge and technology is not able to shift the role of traditional medicine, even at this time the government is promote treatment back to nature (Apriani, 2015).

Tea is one of the most popular drinks consumed in many countries. Tea as one of the commodities of plant products, has an important role in economic activities in Indonesia. Tea is one of the main export commodity beside oil and gas. This is supported by tea plants in Indonesia which are quite extensive and have a large amount of tea production (Syaipulloh, 2011). There are many types of tea on the market. Based on process, tea is divided into 3 types there are green tea, black tea, and oolong tea.

Compound of tea in general were caffeine, tannins, and essential oils. The caffeine element provides a fresh taste and encourages the work of the human heart. It is not dangerous if consumed no more than 300 mg / day. Whereas essential oils provide fragrant taste and smell which are the main factors in determining the value in cup of tea sold or traded (Spillane, 1992).

Currently, various types of processed tea products have been circulating on market. Many findings related to the types of tea and how to process them, the following benefits and properties of various types of tea. Diversification of tea drinks needs to be done to further enhance nutritional potential and the active compounds contained in tea and to improve the mind taste. Karori. *et al* (2007) stated that currently tea processing was already donediversify into several different teas like tea with flavour, organic tea, cafein tea, herbal tea, aromatic tea, and others.

Tea was the most consumed type of beverage, besides being a refreshing drink, tea has properties for the body and can be enjoyed by brewing. Tea products are not only produced from tea leaves, but can be produced from other leaves such as okra leaves.

Tea was a drink containing tannin and polyphenols, an infusion made by brewing leaves, shoots, or dried leaf stems from *Camellia sinensis* plants with hot water (Sembiring, 2009). Drying aims to reduce the water content in leaves to reach of 3-4% (Ajisaka, 2012). Tea leaves contain caffeine, theobromine, theophylline, tannin, adenine, oil volatile, quercetin, naringenin and natural fluorid. Caffeine accelerates breathing, strong stimulants in the central nervous system and heart activity. Theophylline has strong deuretic effect, stimulates work heart and widen blood vessels coronary. Theobromine especially affect muscles. Tannin has it's astringent effect on the gastrointestinal tract. Tea leaves containing tannin, which has properties as antidiare, astrigen, thrush and stop bleeding, and helps neutralise fat in food, but also prevent low density fat oxidation which can be plaque, reduce blood cholesterol, refreshes breathing, and stimulates the brain stem (Jamal, 2010).

Okra is an annual crop, including the *Malvaceae* family and was known by several names there are lady's finger, qiukui, okura, okro, quiabos, ochro, quiabo, gumbo, banya, bamia, bendi, bhindi, bendi beans and arabic coffee (Jain, 2012) Some countries have used Okra as a vegetable plant as well as a cure for several chronic diseases including dysentery, gastric irritation, irritable bowel, inflammation of the throat, gonorrhoea (Lim, 2012) and diabetes mellitus (Amin, 2011). Okra can also be used as a very good food for fetal development, which increases brain growth and development (Gemedede, 2014).

Okra leaves contain several micronutrients and macronutrients including protein, fat, fiber, minerals, potassium, sodium, magnesium, calcium, iron, and zinc needed by the body. The compound contained in Okra leaves including antioxidants, polyphenols, and flavonoids, so it can

relieve fatigue and prevent oxidative stress and has the potential to reduce the risk of diabetes and Alzheimer (Nofi, 2016).

1.2 Research of problem

1. Is there an effect of drying duration on okra leaf tea?
2. Does okra leaves has an effect on tannin level on okra leaf tea?
3. Does okra leaf tea have an effect on organoleptic?

1.3 Objective of research

1.3.1 General Objective:

General objective of this research was to determine the effect of drying duration on tannin level of okra leaf tea

1.3.2 Specific Objectives:

Specific objectives of this research were to:

1. Get the effect of drying duration on okra leaf tea
2. Determine the effect of okra leaf tea on tannin levels
3. Find out the organoleptic characteristics of okra leaf tea

1.4 Benefits of research

1 Society

This research is expected to be able to add scientific information on okra leaf tea and add to the treasures of knowledge and insight for readers and writers.

2 Institution

Providing useful scientific information for the development of food science and technology, especially regarding to tannin enrichment in okra leaf tea.

3 Researcher

Provide information in the development of research regarding to the effect of drying duration on okra leaf tea.