

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Pesto is an extensively diffused Italian pasta sauce whose essential ingredient is an herb or mixture of herbs (Sowmya, R. S., et al, 2022). The word pesto comes from the Italian word "pastare," which means pounding. Pesto is bright green and made from finely ground basil leaves, pine nuts, and parmesan cheese. Pesto is commonly used as a pasta sauce. However, pesto can also be used as a steak dressing, salad dressing, or bread accompaniment. Making pesto sauce is also easy and fast and some even do not go through the cooking process. The difference in how to make pesto sauce will certainly affect the resulting taste. Pesto that doesnot go through the cooking process will have a stronger taste than pesto that goes through the cooking process.

Nowadays, pesto sauce is widely known and favored by all circles. In fact, it is not difficult to find pesto sauce sold in supermarkets. Along with the times, now pesto sauce has many modifications. Pesto sauce that we can find in supermarkets now has many variations. We can find pesto sauce combined with tomatoes, pesto sauce with mint leaves, and even pesto sauce without nuts. The development of the times also affects the mindset of humans to eat healthier foods. Pegagan leaves and macadamia nuts are ingredients that can replace the use of basil and pine nuts in making pesto sauce.

Centella asiatica or pegagan leaves are wild plants that grow in various places such as in fields, plantations and in yards (Yusran et al. 2016). Pegagan leaves is a tropical plant with a fairly wide distribution area, from lowlands to plateau, up to 2,500 m above sea level (Januwati and Muhammadin Sutardi, 2016). Centella asiatica can be found in areas of plantations, fields, roadsides, rice paddies, or in rather wet fields (Besung in Sutardi, 2016). Pegagan leaves are usually used as herbal drinks in the form of tea. Winarto and Surbakti (2003) reported pegagan leaves have been designated as a plant

traditional medicine since 1884. Folk remedies are traditionally processed medicines, hereditary, based on the recipes of ancestors, customs, local beliefs, or customs, are either magic or traditional knowledge (LIPI 2016).

Pegagan leaves have a unique taste with a slight bitter taste at the end. It is also known to have a fairly good content for the body. Centella asiatica herb or pegagan leaves contains compounds such as polyphenols, β carotene, tannins, vitamin C and saponins such as Madecassida and Asiaticoside. Asiaticosides found in pegagan leaves function as antioxidants that can capture free radicals, revitalize blood vessels and improve memory (Anggraini et al. 2014).

Macadamia nuts are one of the nuts originating from Australia. Not all macadamia nuts can be consumed. Macadamia nuts that can be consumed are a *Macadamia integrifolia* with a smooth shell. This nut has a taste that is almost similar to pine nuts, but macadamia nuts have a creamier texture. Macadamia nuts are one of the nuts that are suitable to replace pine nuts in pesto sauce. In addition, macadamia nuts are a valuable source of nutrients, in particular monounsaturated fatty acids. Macadamia nuts are rich in important elements for health such as calcium, iron, phosphorus, magnesium and vitamins such as thiamine (B1), riboflavin (B2), retinol (A1) and niacin (B3) (Maguire et al., 2004). Macadamia nuts have been shown to improve various risk factors for cardiovascular disease, including hypercholesterolemia, body weight, oxidative stress, and inflammation. Macadamia nuts may be useful when consumed alone, or in combination with traditional pharmacotherapy to reduce the risk of cardiovascular disease.

1.2 Objectives of the Study

The objectives of this study are following below:

1. To introduce and expand people's knowledge about pegagan leaves asan herbal plant.
2. To modify the use of pegagan leaves as an herbal plant into a newproduct that is more globally.