

Insect repellent and literature cinnamon essay



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Cinnamon is a spice obtained from the inner bark of several trees from the genus *Cinnamomum* that is used in both sweet and savory dishes. It is commonly added to pastry and to hot beverages such as Coffee and Hot Chocolate. Cinnamon has its distinct brown color and its fragrant smell. The concept of using cinnamon in pastries is not new. But who could have guessed that with the use of creativity, its aromatic smell can be made into an effective insect repellent.

The researchers can make use of the God-given gifts in a unique and imaginative sense and also use their God-given talents and intelligence to create a splendid new idea. An interesting research project like this gives them a sense of curiosity and creativity. This research project gives them the inkling of how to be practical and resourceful. The investigators have observed that us humans love the smell of cinnamon, but in the contrary insects (particularly mosquitoes) don't. This observation really convinced them to push through this kind of topic.

According to what the researchers had discovered, with the aid of the internet, that cinnamon has already been expected to be effective on the same purpose. "Cinnamon especially its oil is expected to become a good mosquito repellent, though they have not yet tested it against adult mosquitoes ([www. sciencedaily. com](http://www.sciencedaily.com))."

They expect their product to be as effective as any other and at the same time good for a person's body and affordable. The insect repellent that the researchers are going to make will be as attractive and as fragrant as

cinnamon. It is not just going to attract your sensory organs but it can also protect you from dengue carrying mosquitoes. *Statement of the problem*

General Problem:

Generally, the study aims to determine the effectiveness of cinnamon oil in the production of insect repellent.

Specific Problem:

1. Specifically, this study aims to determine the effectiveness of cinnamon oil in the production of insect repellent in terms of:

A. 1. Odor

A. 2. Texture

2. Which amount of cinnamon oil is better in the production of insect repellent?

Significance of the Study Nowadays, spread of the disease Dengue caused by the mosquito strain “ Aedis Egyptis” is largely becoming a popular trend. Dengue is a Life threatening disease yet not contagious but still is plaguing several regions of our country. It is on the particular concern due to the recent and frequent declaration of outbreaks of the said disease on different regions and cities of the country, particularly on Quezon City; this is now known as the Dengue Hotspot of the Philippines.

One of the main reasons for the wide spread of the disease are the frequency of stagnant water and unclean surroundings which gives its

carriers ideal place to breed and propagate. A major cause is the sharp rising percentage on the lack of housing and poor waste disposal and management systems throughout the country. With the population suggesting that a continuous " Search and Destroy" should be imposed to reduce mosquito population in the country.

Facing the dawning problem of more dengue casualties, both government and different Industries are racing to seek different effective ways to prevent and decrease the spread of the fatal disease. Dengue is already becoming popular and usual for the public, whereas most of its victims are already recovering; but still, prevention is better than cure.

This study is hoped to help decrease the vulnerability on acquiring the said disease by procuring a natural insect repellent lessening the risk of its fatality.

Scope and Limitations This study made use of cinnamon oil, an oil procured when grounded cinnamon is long soaked in olive oil. Cinnamon oil was obtained from the barks of cinnamon, while the barks were gathered from its tree, " Cinnamomum". Soy milk containing lecithin and starch, served as thickening agent and emulsifiers for oil and water.

The researchers made use of only one setup. The Scent, Texture and Insect Repelling capability of the Product were measured. This study focuses on finding a new natural component for the production of insect repellent.

Review of Related Literature

Cinnamon

<https://assignbuster.com/insect-repellent-and-literature-cinnamon-essay/>

Cinnamon is a spice obtained from the inner bark of several trees from the genus *Cinnamomum* that is used in both sweet and savory foods. Cinnamon trees are native to South East Asia, and its origin was mysterious in Europe until the sixteenth century. Cinnamon is widely used as a spice. It is principally employed in cookery as a condiment and flavoring material. It is used in the preparation of chocolate. It is also used in many desserts recipes, such as apple pie, donuts, and cinnamon buns as well as spicy candies, tea, hot cocoa, and liquors. Insect Repellent

An insect repellent is a substance applied to skin, clothing, or other surfaces which discourages insects (and arthropods in general) from landing or climbing on that surface. There are also insect repellent products available based on sound productions, particularly ultrasound (inaudibly high frequency sounds). These electronic devices have been shown to have no effect as a mosquito repellent by studies done by the EPA and many universities.

Insect repellents help prevent and control the outbreak of insect-borne diseases such as malaria, Lyme disease, dengue fever, bubonic plague, and West Nile fever. Pest animals commonly serving as vectors for disease include the insects flea, fly, and mosquito; and the arachnid tick.

Review of Related Studies Cinnamon oil and its constituent chemicals kill many insects on contact and continue to act as a repellent for long afterward. It's especially effective against mosquitoes and bugs in their larval form, before they develop hard shells. Bugs won't eat from any food source impregnated with cinnamon oil, which is the primary reason that

cinnamon trees evolved it in the first place. This includes human skin, which makes cinnamon oil a delicious-smelling alternative to commercial bug repellents.

Methodology

Instead of directly applying cinnamon oil on their skin for testing, the researchers decided to make a cinnamon oil lotion for the enhancement of the experiment.

They prepared the needed materials which included a $\frac{1}{2}$ cup of olive oil, 10 grams of ground cinnamon, $\frac{1}{4}$ cup honey, $\frac{1}{4}$ cup mineral water, 2 tbsp. grated beeswax, bowls, double boiler, and whisk.

After the researchers gathered all the materials needed, the researchers first extracted the oil from grounded cinnamon by soaking it in olive oil for two days. The extracted oil has a volume of 37 ml.

Meanwhile, they first boil water in the double boiler over medium heat. Then, they melt the grated beeswax, and when it has completely melted, honey and olive oil were mixed. They stirred the mixture with the wire whisk. When they saw that it was well combined, they took it off the stove and poured the mixture into the mixing bowl. They poured it in a container and added the extracted cinnamon oil and some ground cinnamon.