

The feasibility of chili, calamansi and malanggay essay sample



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Cockroaches are the most common pest insects that we are facing off. These insects are the hardest insects on the planet to control because they have the capacity to stay alive for a month without the food. People continue to experiment pesticides to control these pests. This study seeks the possibility of using the extracts of Chili, Calamansi and Malunggay as an effective cockroach killer. The Chili, Calamansi and Malunggay extracts as cockroach killer can be possible by the active component that can be naturally found within the fruits. Chili have an active component called capsaicin which an irritant for mammals, including human, and produces a sensation of burning in any tissue with which it comes into contact. Calamansi have D-Limonene which have the capacity to melt the protective wax coating of an insect.

Malunggay also have an active component called Rubefacient which is a substance for external application that produces a redness of the skin by causing dilation of capillaries and increase blood circulation. The process in making the insecticide was quite difficult. Prepare all the ingredients needed in this study. In extracting calamansi, squeezed the sliced calamansi fruit into a glass container and get the desired amount of the extracted calamansi. And also in extracting malunggay, do the same method but crushed the malunggay in the basin using wood first and then squeezed it until the measurement reached. Pound the chili in a glass container. Mix all the extracts, the pounded chili and the water into a glass container. Then, use strainer to remove the seeds and the small pieces in the mixed product. And pour the finished product into the sprayer. From the tests that the researcher conducted, it revealed that the chili, calamansi and malunggay as cockroach killer are very feasible and effective. INTRODUCTION

Background of the Study:

Cockroaches are insects of the order Blattaria or Blattodea, of which about 30 species out of 4,500 totals are associated with human habitats. About four species are well known as pests. Cockroaches are one of the oldest groups of insects, indicating how successful they have been related to diet—they are scavengers and will eat anything organic. They prefer food sources in adapting to changes in their environments. One reason for this success may be such as starches, sweets, grease and meat products, but other items may include cheese, beer, leather, glue, hair, and starch in book bindings, flakes of dried skin or decaying organic matter (plant or animal). Chili have an active component called capsaicin which an irritant for mammals, including human, and produces a sensation of burning in any tissue with which it comes into contact.

Calamansi or Calamondin belongs to the fruit tree family Rutaceae. The fruit of the Calamansi is a small, round lime, a little bigger than size of a thumbnail, about 30 mm (an inch) in diameter. Similar to other citrus fruits, the calamansi is high in vitamin C, and the juice can be an excellent vitamin basis. The lively ingredient D-Limonene destroys the wax coating of the insects' respiratory system. Malunggay, known scientifically as *Moringa oleifera* Lamk, is one of the world's most useful plants. It is used as food, effective flocculants or water treatment, antibiotic, source of oil, and coagulant for turbid waters. It has an active component called Rubefacient. Rubefacient is a substance for external application that produces a redness of the skin by causing dilation of capillaries and increase blood circulation.

Statement of Problem:

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The study seeks to answer the following questions:

* Can Chili, Calamansi and Malunggay extract is an effective cockroach killer? * Is there any significant difference between the “ Chili, Calamansi and Malunggay extract” and commercialized pesticide? Significance of the Study:

With this study, many people will surely benefit from this project not only because it is cheaper than commercial but also is has lesser health risk. This study will help Filipinos to lessen their expenses with regards to chemical insecticide products. The materials needed in this study can be easily found within the kitchen or even in the surrounding. Scope and Limitations:

This study focused only on developing the extracts for terminating cockroaches. This project also studies some extracts to enhance the effectiveness of the insecticide. Tests were conducted to prove the ability of this product if it is and effective cockroach killer. Review of Related Literature:

Chili is which is spelled differently in many regions chilli, chile, and chilli. The term chilli in most of the world refers exclusively to the smaller hot types of capsaicim. It is a hot pepper. Even though chili's maybe though as vegetable, their culinary usage is, a generally spice, the part of the plant that is usually harvested is the fruit. Researchers used capsaicim from chillies to kill the nerve cells in the pancreas of mice. And Chili also contains hotness which can kill cockroaches. Citrofortunella microcarpa, the calamondin or calamansi, is a fruit tree in the family Rutaceae native Asia. Calamansi, belong to the fruit tree family Rutaceae.

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Methodology

Materials:

In performing this experiment, the researcher needed the following:

- * 50 ml of Calamansi extract
- * 30 pieces Of Chili
- * 40 ml of Malunggay extract
- * 100 ml of water

Getting the extracts are possible by using the following materials: Small basin and Wood. Knife Measuring cup. Strainer. Glass container

General Procedures:

The researcher prepared all the ingredients needed in this study so he can now begin the experiment. In extracting calamansi, the researcher squeezed the sliced calamansi fruit into a glass container and gets the desired amount of the extracted calamansi. And also in extracting malunggay, the researcher did the same method but he crushed the

malunggay in the basin using wood first and then squeezed it until the measurement reached. The researcher pounded the chili in a glass container. The researcher mixes all the extracts, the pounded chili and the water into a glass container. Then, the researcher used strainer to remove the seeds and the small pieces in the mixed product. The researcher poured the finished product into the sprayer. Results and Discussion

Findings:

This shows the investigation of Chili, Calamansi and Malunggay as pesticide. The data was shown in tabular form.

Table 1: Cockroach tested with Chili, Calamansi and Malunggay product.

Number of times spray	Number of cockroach	Number of cockroach killed
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Time killed 5	1	1
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50 seconds

In the first table, the cockroach was sprayed 5 times of the Chili, Calamansi and Malunggay product. The cockroach died 50 seconds after the product sprayed. The product is effective. Table 2: Cockroach tested with Commercial Insecticide.

Number of times spray	Number of cockroach	Number of cockroach killed
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Time killed 2	1	1
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20 seconds

In the second table, the cockroach was sprayed 2 times of the commercial insecticide. The cockroach died 20 seconds after it has sprayed. Analysis of

Data:

The Chili, Calamansi and Malunggay as cockroach killer is effective but the commercial insecticide is more effective. Conclusion:

Therefore, the Chili, Calamansi and Malunggay as cockroach killer is effective and feasible in making insecticide.

Recommendations:

The researcher recommended another researcher to try applying the insecticide in different insects. Bibliography: en. wikipedia.

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