

Guava leaves investigatory project

[Business](#), [Industries](#)



The purpose of this investigatory project is to prove that herbal plants can cure skin disorders like acne that is irritating and can lower our confidence who are going to the stage of puberty like me that's why I searched on the internet about herbal plants that can treat skin disorders, and I found one guava.

Guava has many constituents and high contents which are characterized by their antioxidant functions these nutrients can treat acne that is irritating and boost our confidence down those going to the stage of puberty like me and 30+ who is still having this type of skin disorder this investigatory project that we can use the extracts of guava to treat acne.

Background of the study and introduction

Guava plants in the myrtle family which contains about 100 species of tropical shrubs, nowadays people are focusing in herbal plants especially those who are common in the environment. One of the examples is the guava plant (*Psidium guajava* Linn). Based on research this plant is good for healing and treating wounds and other skin infections. So in my research I want to make a bathing soap out of it, because I know that it is effective.

People, researchers, scientists were focusing to medicinal plants. They want to prove that there are plants that are more effective against diseases especially in skin. This study refers to a plant that can be made into a bathing soap and improves its quality while using this plant (guava leaves). I want people to handle easily in treating their skin disorders. Instead of boiling the leaves, now it's easy to apply. Boiling takes much time.

Statement of the Problem

I stated that Guava leaves extract is good for skin. Based on my research, it has many constituents that are good for skin. It answers the following questions:

- Is there any constituent of guava leaves that is good for skin? * What are those?
- It can really treat skin disorders/ Acne?

Hypothesis

Can guava leaves can treat/cure acnes using its extract and making a soap that can be used on face for treating acne. Yes, the extract of the guava leaves can be used in making soap and can be used on treating acne my acne has lessen for I applied it on my face for a week.

Significance of the Study

You can make a bathing soap with guava leaves extract as treatment for acne. This plant is very common to our environment, and aside of its availability; it is easy to cultivate. It contains many components for healing skin disorders.

Scope and Limitation

The study of guava leaves and getting their extract is often useful. It has the ability to treat, cure, disinfect skin disorders and capable of being a herbal plant for acnes.

Definition of Terms

- Astringent- antiseptic properties
- Decoction- infusion of fresh leaves used for wound cleaning and skin to prevent infection and to facilitate healing. Good for skin disorders.

- Volatile- a substance that changes into a vapor at a relatively low temperature.
 - Eugenol- oily liquid from cloves. (C₁₀H₁₂O₂)
 - Cloves- aromatic spice from the dried flower bud of a tropical tree.
 - Tannin- a brownish or yellowish substance found in plants and used in astringents. Saponins- soap from plants; any group of chemical substances extracted from plants that form a soapy lather mixed with water and are used to make soap and detergent.
 - Amygdalin- resin used in paints and adhesives.
 - Resin- yellow or brown color and organic substance from plants. Malic Acid- acid from fruit; a colorless crystalline solid found in fruits such as apples. (C₄H₆O₅)
 - Aldehydes- organic compound; a highly reactive organic compound produced by the oxidation of an alcohol and having a CHO group especially the acetaldehyde Ash- the powdery substance that is left when something has been burnt
- Guava: Scientific Name: Psidium
Guajava

Methodology

Materials:

- Beaker.
- Molder.
- NaOH (sodium hydroxide) (60 grams) (150 ml) solution Gas stove.
- Guava Leaves.

The procedure

Prepare the stove to be used. Boil it for 10 minutes (Low Heat); Separate the skin from the extract. Put it in a clean container, let it cool and then set aside. Prepare the Sodium Hydroxide (NaOH) or Lye. Put in a container. (Note: Read first the directions in using Lye. For Example: Don't put the NaOH on aluminum containers.

You must use rubber gloves and Masks in dealing with lye and with other chemical substances. Don't play with them and Keep out of reach of children.) Put some oil (3 tbsp.) and Water (3 tbsp.). Mix it thoroughly. Put the extract of the fruits to the mixture. (1/2 tbsp.). Stir the mixture continuously in a single direction. (Note: Make sure the mixture is viscous)

Let it dry for about 2 days or more.

Results, Discussion, Conclusion, and Recommendation

The researchers found out that the 4 seasons fruits can help minimize pimples and pores. It can also help clear skin impurities because of the anti-oxidants that the soap contains. This research gave us a hard time because there are a lot of instances that the measurements of the ingredients would not compliment the desired results. There can also be a downside in this experiment because the soap is not intended to be used in scars because it might irritate it and it stings.

The researchers therefore conclude that the guava extract soap can reduce pimples and other skin impurities. This is shown by the experiment that we conducted by putting various kinds of ingredients in different amounts and

sizes. The experiment was successful because the researchers came up with their desired result even after several tries.

Conclusion and Recommendation

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