

# Formulation and Evaluation of Hair Conditioner from *Annona Squamosa Linn*

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**Abstract:** *The formulation and evolution of hair conditioner from Annona squamosa Linn, commonly known as sugar apple or custard apple, have gained significant attention in the realm of natural and sustainable hair care products. Annona squamosa Linn is a tropical fruit tree that is rich in vitamins, antioxidants, and other beneficial compounds that can promote hair health and nourishment. This research aims to explore the potential of Annona squamosa Linn as a key ingredient in hair conditioners through the extraction and utilization of its bioactive components. The formulation process involves extracting essential oils, vitamins (such as vitamin C and B vitamins), minerals, and antioxidants from Annona squamosa Linn to create a natural and effective hair conditioning product. The evolution of using Annona squamosa Linn in hair conditioners signifies a shift towards plant-based ingredients in the beauty industry, driven by the growing demand for sustainable and eco-friendly products.*

**Keywords:** Annona Squamosa Leaves, Hair Conditioner



## I. INTRODUCTION

Hair care products play a crucial role in maintaining the health and appearance of hair, with hair conditioners being a staple in many individuals' beauty routines. The evolution of hair conditioners has seen a shift towards natural and sustainable ingredients, driven by consumer demand for products that are not only effective but also environmentally friendly. *Annona squamosa Linn*, also known as sugar apple or custard apple, is a tropical fruit tree that has garnered attention for its potential benefits in hair care formulations.

*Annona squamosa Linn* is a fruit tree native to the tropical regions of the Americas and is known for its sweet and fragrant fruit. Beyond its culinary uses, *Annona squamosa Linn* is rich in vitamins, antioxidants, and other bioactive compounds that have been shown to offer various health benefits. These beneficial properties make *Annona squamosa Linn* an attractive ingredient for formulating hair conditioners that can nourish, hydrate, and protect the hair.

### Herbal Medicine

Herbal medicine has its origins in ancient cultures. It involves the medicinal use of plants to treat disease and enhance general health and wellbeing. Some herbs have potent (powerful) ingredients and should be taken with the same level of caution as pharmaceutical medications. In fact, many pharmaceutical medications are based on man-made versions

of naturally occurring compounds found in plants. For instance, the heart medicine digitalis was derived from the foxglove plant. Herbal medicines contain active ingredients. The active ingredients of many herbal preparations are as yet unknown. Some pharmaceutical medications are based on a single active ingredient derived from a plant source. Practitioners of herbal medicine believe that an active ingredient can lose its impact or become less safe if used in isolation from the rest of the plant.

#### **PROCEDURE:**

Cup-plate agar diffusion method using Nutrient agar.

In this technique, Petri dishes of agar are prepared by pouring melted agar media previously incubated with selected microorganism i.e. *Staphylococcus aureus* (for antimicrobial activity) and *Candida albicans* (for antifungal activity).

After solidification of agar cups are made with the help of borer and cup are filled with a solution of suitable concentration of sample and standard respectively.

Take this petri plates in the refrigerator for 10 minutes and then incubate at 37°C for 24 hrs.

The antimicrobial and antifungal agent diffuses through the agar around its cup and produces a characteristic zone of inhibition of the microorganism sensitive to the sample. The diameter of which can be measured.

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