

# Method of Making Organic Insecticides, Hair Color and Lip Lotion by Utilizing Natural Constituents

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## Abstract

*In today's chemical world, a return to nature has become the need. Since chemicals are now used in almost everything, they have become a necessary component of modern life. For this reason, avoiding the use of chemicals and using products made from natural materials is beneficial for the environment, human life and society in every aspect. In the present paper mainly three products were made. First product was organic plant insecticides, made using natural materials such as Neem leaves, Custard apple leaves, and garlic. Use of this insecticide not only protects the plants against insects, but it is also safe for children, animals, and the environment. The second product was a hair color made from dry henna leaves, dry coconut husk, dry Custard apple (*Annona squamosa* L.) leaves, Aloe vera gel, and coconut oil. It not only provides black color to the hair but also nourishes the hair. The growth of hair is also increased; its color does not go away from the hair for a long time and natural black color and shiny hair is also maintained. The third product was a lip lotion, made from beet root, coconut oil, and natural ghee. Generally the skin of the lips gets dry during winter season; it also gets chapped and often bleeds and blackness is also seen in the lips. This lip lotion can help to get rid of all such problems as it not only removes the blackheads on the lips but also makes the skin smooth and soft preventing bleed and gives a beautiful lips to the person.*

**Keywords:** Natural materials, environment, organic pesticides, hair color, lip lotion

## INTRODUCTION

Neem and Custard apple leaves both contain the active compound azadirachtin [1] which repels and inhibits insect growth. Neem has been established to possess great insect repellent properties, which have been attributed to the repugnant odor of the plant [2]. The insect repellent property of neem operates by interacting with the odorant and gustatory receptors in the insect [3]. Studies have reported the insect repellent action of neem on many insect species of plants [4]. Garlic contain high level of sulfur [5] which repels mice, birds, worms, beetles and certain larvae. The liliaceae family of garlic is well known for its antibacterial properties [6, 7]. Limonene is found in citrus oils [8]. Soaps that are liquid-based contain alkyl benzene sulphonate. Citrus essential oils have gained more attention due to their broad-spectrum insecticidal, antibacterial, and antifungal properties, as well as their high yields, aromas, and flavors [9–12]. They cause the insect to lose water and eventually perish by damaging its cell membrane [13], particularly efficient against insects with soft bodies, like mealy bugs. Custard apple leaves are a great natural source of copper [14]. It gives a dark melanin color to the hair. The active component of *heena* is Lawson (2-Hydroxy 1,4-naphthoquinone) [15], which repairs hair cuticles, stops hair fall, prevents dandruff and premature graying of hair, balances the pH of hair,

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also give reddish- black deposit in hair. Dry coconut husk contains cellulose, hemicelluloses, and lignin [16–18] which detoxifies the hair strands and scalp, restores shine, repairs damaged hair, and promotes healthy fast hair growth. *Aloe vera* gel works well for the scalp and can be used to encourage hair growth in addition to treating hair loss [19]. *A.vera* gel contains quinines and anthraquinones [20–22], which gives brown to reddish-black color and seal the color in hair. Coconut oil contain fatty acid [23]. It plays a crucial role in keeping hair healthy, and acts as conditioner to hair. The active component of beet root is fatty acid, amino acid, minerals and fibers [24] which fights dry patches on the skin and calms down the irritation of skin, making the skin shining soft and youthful. The lip lotion’s beetroot extracts nourish and moisturize lips to bring them back into harmony and promote optimal health [25]. Coconut oil also treats illness and infection, heals wounds, and protects skin against blemishes. *Ghee* contain butyric acid which is natural fatty acid [26] that helps in healing damage skin, reducing redness and inflammation. Materials used to make organic products are produced by organic farming. Although food and agricultural products are the most well-known organic products, clothes and personal hygiene products can also be classified as organic as they are produced using organic farming practices. Organic items listed on the National List of Allowed and Prohibited ingredients can be produced using synthetic and non-synthetic ingredients. The use of natural substances is a key factor for organic producers. Physical, chemical, mechanical or biological farming methods or chemical methods are used to achieve the full extent and synthesize organic products.

## **MATERIALS & METHODS**

### **Experimental–Organic Insecticides**

#### **Materials**

Neem leaves, Custard apple leaves, Garlic, liquid-based soap, essential oil (Citrus oil).

#### **Procedure**

Collect the raw ingredients, that is neem leaves and Custard apple leaves. In the second step, boil previously collected ingredients with water and garlic for an hour. Filter all the solid ingredients by using filtration method. Add the obtained liquid into a bottle and allow to cool down. Also add an essential oil, liquid-based soap in it, shake well and transfer the solution into a spray bottle. Spray directly on plants during morning and evening twice a week.

### **Experimental – Organic Hair Color**

#### **Materials**

Dry *henna* leaves, Dry coconut husk, Dry Custard apple (*Annona squamosa L.*) leaves, *A.vera* gel, coconut oil

#### **Procedure**

Collect all the ingredients such as *A.vera*, dry coconut husk, dry *henna* leaves, dry Custard apple leaves and check the weight. Then simply mix and roast dry coconut husk, dry *henna* leaves, and dry Custard apple leaves. Cool down and crush the mixture, then strain and collect it. Add *A.vera* gel/coconut oil, also add water in it. Finally it is packaged and ready to apply on hair.

### **Experimental–Organic Lip Lotion**

#### **Materials**

Beet root, Coconut oil, natural *Ghee*

#### **Procedure**

Take beet root then wash it. Peel off the outer skin of beet root and cut it into small pieces. Extract the juice by the help of a juicer. Take 1 teaspoon of coconut oil/*ghee* and add 6 teaspoons of beet juice into a vessel and mix well. Put the above vessel into water bath for an hour and boil the solution. Cool down the hot solution at room temperature. Transfer into a bottle and put it into refrigerator.

## RESULT AND DISCUSSION

### Experimental–Organic Insecticides

The experimental-organic insecticide was found to reduce the carbon footprint. Long-term, more robust plants pests were unable to become resistant. It reduced smell as a result of natural substances. Neem trees are easily available in fields, open spaces, and public parts of society. Their leaves are also readily obtainable, making them safer for kids and other outdoor animals. Garlic is also widely accessible in the market. The oil used in this recipe comes from the orange peel. After peeling the orange, the peel is mostly used to eat the inner pulp and are thrown away. Orange peel can be used to make good useful oil instead of throwing away, which can be used in the making of this product (Figures 1 & 2).



**Figure 1.** Before use of organic insecticides.



**Figure 2.** After using organic insecticides.

### Experimental–Organic Hair Color

The prepared organic hair color showed appearance of human hair fiber in a natural way, making hair more resilient to heat-related damage. Coconut husks are usually thrown away on the roads and in many places of worship. If they are utilized in organic dyes, they can also be recycled. *Henna* plants can be found in many places. It is a plant that can be grown easily and its leaves are readily available. Custard apple plant is a plant found in different rural areas and fields, its leaves are also easily available. Due to easy availability of these ingredients, it is easy to make organic hair color at a very nominal cost, achieving excellent results in hair (Figures 3 & 4).



**Figure 3.** Before using hair color.



**Figure 4.** After applying color in hair.

#### **Experimental–Organic Lip Lotion**

The experimental-organic lip lotion was found to make lips lighter and softer. It nourishes and moisturizes the lips as it is entirely natural. Usually, beet root is readily available in the vegetable market and pure cow's *desi ghee* can also be prepared using a traditional simple method and coconut oil can also be prepared at home. The prepared lip lotion has shown very good results on the skin of the lips (Figures 5 & 6).



**Figure 5.** Before using lip lotion.



**Figure 6.** After using lip lotion.

## CONCLUSION

The market for organic products is currently expanding at the quickest rate in the entire globe, including India. By generating revenue holistically, organic products support national economic growth, ecological health, and reduce health risks for consumers. Given that India is currently the world's top producer of organic food, we may draw the conclusion that promoting organic farming will help the country become more economically, ecologically, and nutritionally sound in the near future.

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