



The Herbal Hair Dye

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ABSTRACT:

The synthetic hair dye involves the chemicals which results in unwanted effects like irritation, breakage of hair, Grey skin discolouration & cancer, so they are inconvenient to consumer so there is a need of safe, harmless herbal hair dye extract from plant sources. The word herbal is a symbol of safety the herbal hair dye is a cosmetic product used for the colouring hairs. It is classified as temporary, semipermanent, & Permanent. The ingredients used in herbal hair dye help to promote longer shiny stronger hair. Prevent premature greying. The herbal hair dye has shown there no hair damage, scalp irritation so it proves that it is the key alternative for the Synthetic hair dye.

Keywords - Herbal hair dye, Temporary, Semipermanent, Permanent.

Introduction:

Hair colouring or hair dyeing is the practice of changing the hair colour. The main reason of hair colouring is to recover white & grey hair. Today most of the people are very careful about their health & beauty and hairs play an important role. In comparison to herbal hair dyes synthetic dyes are reported to cause skin or various skin related diseases. The manufacturing process of synthetic hair dyes is also hazardous to the people's health & the fear of side effect of synthetic dyes has limited its use by customers throughout the world.

The naturally occurring herbal drugs without any adverse effect are used for healthy hair. The natural dyes are the colours obtained from plants, animals or insects matter without any chemical processing. Many plants like *Acacia arabica*, *Juglans regia*, *Pterocarpus indicus*, *Lawsonia inermis*, *Pilocarpus jaborandii*, *Phyllanthus emblica*, *Aloe barbadensis*, *Hibiscus rosasinensis*, *Uncaria gambir*, *Terminalia bellirica*, *Tinospora cordifolia*, *Saussurea lappa*, *Nardostachys*, *Jatamansi*, *Juglans regia*, *innamomum zeylanicum*, *Centella asiatica*, etc are used as main ingredients in the hair care preparation mainly in herbal hair dye.

The natural dyes act as mordants because they contain tannins. Tannins build affinity between dyes & hair, and this improves colour and fastness of dye. Hair dyes include dye modifiers, alkalizers, wetting agents, fragrance & other chemicals used in the small amount that gives special qualities to hair such as softening texture or give desired action to dye. The drugs obtained from the plant sources are easily available, less expensive, safe and efficient with less side effects.

Types of hair dyes:

A) Temporary hair dye:

1. A temporary dye will colour the hair for temporaryity.
2. The colour dye does not penetrate into the hair.
3. It will wash out in one or two shampoos.
4. The temporary dye only coats the shaft of the hair, providing colouring of the hair.
5. Crayons, powders etc are used for temporary colour.
6. Crayons are used directly rubbed on hair or applied with the help of brush.

B) semipermanent hair dye:

1. semipermanent colour is a artificial colour that will wash out in 4-8 week.
2. The semipermanent dye coated on the outside of the hair shaft.
3. It is one part solution that is not mixed with developer so it can not lighten the hair.
4. The performance of the colourants can be increased by the inclusion of solvent.
5. Shampoo is the commonly used base.
6. Most of the semipermanent colourants dye stuffs which gives natural affinity forthe hair.

C) Permanent hair dye :

1. It is most commonly used hair product.
2. Permanent hair colour is the permanent as the name suggest.
3. Permanent colour penetrates into the hair shaft and changes hair colourpermanently.
4. A permanent hair colour is the two part solution
i.e colour & developer and it can lighten or darken the hair.
5. They can cause hair damage.
6. Permanent hair colour is very effective on mixed i.e white or black hairs.



Advantages of herbal hair dye:





1. Herbal dyes are not harmful to environment or consumer because of its naturalorigin.
2. Herbal dyes gives a natural shades & help to achieve soft, soothing look.
3. No chemical reaction involved during dye preparation.
4. Herbal dyes will not cause harm or health problems.
5. Herbal dyes having no disposal problem.


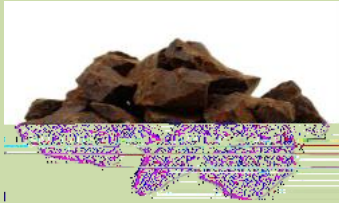

Disadvantages of herbal hair dye:

1. Herbal hair dyes are difficult to standardiz or blend.
2. Herbal hair dyes are difficult to produce because of its availability of raw material.
3. Herbal dye preparation is a lengthy dyeing preparation.
4. Herbal dyes having inadequate degree of fixation.
5. Natural herbal dyes having poor reproducibility of shade.

Ingredients of the herbal hair dye:

<i>Common name and botanical name</i>	<i>Picture</i>	<i>Chemical constituents</i>	<i>Uses</i>
<p><i>Henna:</i></p> <p><i>Lawsonia inermis</i></p>		<p><i>Lawson, glycoside</i></p> <p><i>Gallic acid, flavonoid, white resin.</i></p>	<p><i>Antibacterial, antifungal, or treating grey hairs, colouring agent.</i></p>
<p><i>Shikakai: Acacia</i></p>		<p><i>Saponin, acacia acid, natural sugars, Spinasterol.</i></p>	<p><i>Strengthen the hair roots, promote hair growth.</i></p>
<p><i>Amla:</i></p> <p><i>Phyllanthusembillica</i></p>		<p><i>Vitamin C, Tannins.</i></p>	<p><i>Promote hair growth, prevent grey hair, stop hair fall.</i></p>

<p><i>Hibiscus:</i></p> <p><i>Hibiscus rosasinensis</i></p>		<p><i>Alkaloids, Flavonoids, amino acids, beta carotin</i></p>	<p><i>Enhance natural hair colour, make hair stronger, prevent hair from greying.</i></p>
<p><i>Aloe: Aloe vera</i></p>		<p><i>Tannins, carotenoids, Isoflavones</i></p>	<p><i>Nourishes the hair, natural and mordant.</i></p>
<p><i>Tea:</i></p> <p><i>Camellia sinesis</i></p>		<p><i>Tannins, carotenoids, Isoflavones.</i></p>	<p><i>Conditioner, antioxidant, mordant, darken the hair.</i></p>
<p><i>Bringraj: Eclipta alba</i></p>		<p><i>Flavonoids, steroids, Terpenoids</i></p>	<p><i>Natural hair tonic</i></p>

<p><i>Reetha:</i> <i>Sapindus mukorossi</i></p>		<p><i>Saponin, sugars, mucilage</i></p>	<p><i>Control hair fall, remove dandruff from scalp.</i></p>
<p><i>Black catechu:</i> <i>Senegalia catechu</i></p>		<p><i>Flavonoids, alkaloids, epicatechin</i></p>	<p><i>Enhance hair volume, shine and colour the hair.</i></p>
<p><i>Jatamansi:</i> <i>Nardostachys jatamansi</i></p>		<p><i>Sesquiterpens, Coumarin, lignanin, Alkaloids</i></p>	<p><i>Control hair fall, promote hair growth.</i></p>

Method of hair dye preparation:

Weighing:

Weight the ingredients for the batch, for small batches the small amount of ingredient is necessary and for large batches large amount of ingredient is necessary.

Mixing:

After checking and weighing the ingredients, the ingredients are simply mixing. The ingredients are totally mixed with each other.

Filling:

The finished batch of hair product is then delivered to filling area then measure the

amount of hair dye into bottles.**Packaging:**

From the filling area, plastic bottles are taken. At the packaging line the bottles are packed completely and label them with full information, then product is taken to storage area or warehouse for await distribution.

Applications of herbal hair dye:

1. Help in covering grays hair without any side effects:

The best use of herbal hair dye is that it help in coverage of gray hair without causing any side effects. Therefore the herbal hair dye are usually considered as safest hair colour in nature, they are free from any harmful chemicals Hydrogen peroxide, PPD, Ammonia are various chemicals which cause damage to hairs & also rupture the hair quality.



2. For better hair growth:

One can apply the custard apple fruit paste on the hair to have long, thick, shiny hairs. This helps in reduce the hair fall & minimize the occurrence of inflammation. When the paste is applied on the hair, nutrients are better absorbed, it promotes the thickness of hair & hair follicles are nourished well.



3. cures existing hair problems:

The natural hair dye is herbal in nature therefore with its organic nature it helps to cure existing hair problems like dandruff, hair fall, split hairs end, etc. The herbal hair dye is safe & restore the damaged hair from its former condition.



4. nourishes hair strands from its core:

The most important benefit of the herbal hair dye is boost and nourish the hair without any compromise due to its organic nature, safe herbal nutrients, herbal hair dye is the best colouring dye of hair.



Global hair dye market:**TOTAL GRAY COVERAGE**

The global hair color market by total gray coverage was valued at \$8.65 billion in 2016.

PERMANENT HAIR COLOR

The global permanent hair dye market is growing at a CAGR of 7.71%.

TDS/TD FORMULATION

Global TDS/TD formulation hair dye market contributed the highest revenue of 44.31% in 2016.

Market Growth:

2021 value: \$19.33 billion 2022 value:

\$20.98 billion 2027 value: \$ 36.2 billion

Result:

The herbal hair dye contains all the goodness of the natural ingredients. The herbal hair dye acts as a hair growth promoter, hair nourisher, conditioner, anti-dandruff agent. The natural ingredients used in herbal hair dye restrict hair fall control, greying of hair, provide shine, strengthen hair. The antioxidants in herbal hair dye need to clean the scalp, kill infection causing bacteria & stimulate the hair growth. The regular use of herbal hair dye provides smooth hair & shows a super effect due to natural ingredients. It is non-toxic, non-habit forming, and has no chemical so it also leads to an increase in the shelf life of herbal hair dye.

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