TANG [HUMANITAS MEDICINE]

CC BY NC

Review

Management of Greying of Hairs (Sheeb) and Use of Hair Dyes (Khizaab) in Unani Medicine

Seema Rani

Assistant Professor, Department of Ilmul Saidla, Iqra Unani Medical College, Jalgaon, Maharashtra.

ABSTRACT

Greying of hairs or Canities (Sheeb) is a hair disorder characterized by premature graying of scalp hair, beard, moustache etc. In Unani system of medicine (USM), the causes of premature greying of hairs, concept behind graying of hairs, principles of treatment, preparations that prevent premature greying of hairs, regimen, systemic and local treatment to stimulate pigmentation and the most interesting point is the use of different type of hair dyes (khizabat) is all illustrated. Classical texts described black, red, blond and white hair dye preparations with formulae and method of use. Initially for the hair graying management, utilizing simple and complex substances from plants, minerals, metals and mixture of these was the main method, which satisfied the desire to change the colour of the hair. With the advancement in chemical science, dyes formulaes, method of formation and application are changed. But due to the awareness about demerits of chemical dyes, people are looking back towards the natural ways to combat hair greying and herbal hair dye is an alternative. This paper is an overview of Unani drugs of local and internal use for hair greying with special attention towards herbal dyes. Most commonly used herbs in khizaab with their actions and constituents has been summarized. This is an effort to globalize the benefits of Unani herbs in hair greying problem. In short, International demand for hair dyes has been steadily growing and there is a wide scope for exploring different aspects of hair greying treatment and dyes in USM.

Keywords Sheeb (graying of hair), Khizaab (dye), Unani, cosmetics, hair

History of khizab

Before the invent of modern cosmetics, the Arab physicians had laid foundation of a new branch of medical science as Ilm-ul-zeenah (science of beauty, i.e. cosmetology) in the history. Human has the nature to change, so as the appearance of their hair because it was a way to differentiate the social status. Hair dye has been used since ancient Egyptian times when Rameses II reinforced red hair color using henna (Lawsonia alba). In ancient Greece, the hair was bleached with a rinse of potassium solution and rubbed with a type of ointment made of yellow flower petals and pollen (Begum and Idris, 2016).

History in Islamic medicine about khizab is equally important as it is Sunnah. It is documented in various hadis that The Prophet [SAW] uses henna on his mubarak head." The Prophet [SAW] said: "The best things with which you can change gray hair are Henna and Katam." (Sunan An-Nasa'i). The use of Henna was the Sunnah of the Companions of our beloved Prophet (sallallahu alayhi wasallam), namely Abu Bakr as Siddique (radhi Allahu anhu) who applied it to his blessed hair and beard (Bhat and Qureshi, 2013).

*Correspondence: Seema Rani
E-mail: seema.malik786@gmail.com
Received May 05, 2018; **Accepted** May 23, 2018; **Published** May 31, 2018
doi: http://dx.doi.org/10.5667/tang.2018.0010
©2018 by Association of Humanitas Medicine
This is an open access article under the CC BY-NC license.
(http://creativecommons.org/licenses/by-nc/3.0/)

Literature survey showed that the use of hair colours, natural or man-made is mentioned in historical records from the earliest Egyptians through many successors in their cultural heritage, Greeks, Hebrews, Persians, Chinese and Hindus. Khizabat were used by Masir Joyah, Hkm Abdul Gafoor Marhoom and Hkm Jafar Akbar Abadi. Even the Great Emperor Shahjahan used khizabat to colour his hairs black. Classical books of Unani medicine like Ghina Mana (Qamri, YNM), Kamil al Sana (Majoosi, 2010), Zakheera khwazam shahi (Jarjani, YNM), Alqanoon, Qanoon fil tib (Sina, YNM) has described black, red, blond and white hair dye preparations. Ali Ibn Abbas Majoosi, author of Kamil al Sana also described preparations for internal use that prevent premature greying of hairs. Khizabat were used by Masir Joyah, Hkm Abdul Gafoor Marhoom and Hkm Jafar Akbar Abadi. Even the Great Emperor Shahjahan used khizabat to colour his hairs black.

Hair dyes are in an important phase of development and since the Second World War, great progress in discoveries and applications of new synthetic dyes has occurred. Henna (Lawsonia alba) was found in North Africa. Brazil is a country that, because of its high miscegenation, presents almost all the hair types. Furthermore, because of the great importance that women give to their hair treatments, Brazil is now the world leader in hair dye products. Nevertheless; the dye market has focused on exports, mainly to South American countries (Rukangira, 2001).

INTRODUCTION

www.kci.go.kr

Sheeb /Graying of hairs/ Canities is a hair disorder characterized by premature graying of scalp hair, beard, moustache etc. Sheeb is an Arabic word which literally means old person or hoariness (ageing). In this condition the person appears to be old in young age as graying of hair is the most common sign of ageing. Sheeb is not grey colour hair at all nor pure white hair, but there are different shades of graying from dirty white to silvery white. Genetic inheritance determines the onset of graying in different individuals. Unani physicians defined Sheeb as Graying of hairs before the age of fifty and considered it as disease. If graying of hairs before the age of twenty, it is called as premature canities. Its cause may be pernicious anaemia, auto immunity, hyperthyroidism, stress or use of certain chemicals (Khan, 1996).

Grey hair (Canities) is defined as low melanogenic activity as a result of fewer melanosytes, melanosomes and loss of tyrosinase activity. Melanin protects hair by screening against UV rays and excretion of heavy metals, chemicals and toxins by binding melanin these harmful causes. Biological value of hair pigmentation is not clear but it has sociological value.

Irrespective of age, Graying of hairs has become a crucial problem in the present era. It can start from the age of fifteen due to stressful environmental conditions, deficiencies of certain vitamins and minerals in the body, genetic factor, life style, faulty food habits etc. To overcome the problem, many synthetic dyes are used by the community. But these dyes are having chief disadvantage of producing hypersensitivity and systemic toxicity in some individuals. Almost all brands of hair dyes contain very harmful chemicals. Among these chemicals most harmful is ammonia containing dyes. Even ammonia free dyes contain PPD (para phenyl diamine), or resorcinol or ethanolamine which are also equally harmful for the hairs. Use of natural colorant can be beneficial to combat the side effects (Sharma, 2015).

Every individual has his own likings for colours and the nature manifest itself in a wide number of colors. Due to the side effects of most of synthetic hair colorants alone are proving insufficient for global society so there is need to supplement it with herbal drugs. Now days in the whole world there is trend to return towards the use of herbal products to adopt more natural way of life. It is generally believed that herbal hair dyes when compared to their artificial counterparts do not cover a wide spectrum of colours. It must be noted, however, that extensive research has been and is being carried out to overcome this limitation. Some success has been achieved in development of new shades by utilizing new herbs, using mixture of various herbs or adding safe inorganic salts to the formula. In allopathic system most of the artificial permanent hair colorants fall in the category of oxidation dyes and use hydrogen peroxide as the oxidant. The oxidation process has a damaging effect on hair structure and makes it brittle and unmanageable (Radhika et al., 2012).



Fig. 1.

On the other hand, the coloration is normally achieved at a higher PH than 9 due to presence of Ammonia. Herbal hair dyes, however, do not have these disadvantages and the ph of the pastes prepared are normally within the range of 5-6 (The natural PH of normal skin is 5.5-6). Herbal hair dyes are generally less expensive than artificial colors, contain safer ingredients and if manufactured properly are as easy to use (Kapoor, 2005).

Even though the Unani system has enormous literature of dyes, still we do find bigger lacunae in the field of cosmetics, as Unani system lacks in attractive, consumer compliance, cosmetic product formulations, official quality control for these products. Thus, there is a need for preparation of Unani hair dyes and their scientific evaluation. The present review focuses on the potential of herbals to combat hair graying and herbal dyes.

Causes of premature greying of hairs in USM

- Killat tagzia (under nouritioment) is a big factor according to Unani physicians as they recommend highly nourtious diet for retention of hair pigment specially full of proteins.
- Weakness of three faculties namely quwwate ghazia (nutritive faculty), quwwate mushabiha (power of homogenization) and quwwate mugaiyarah (faculty of transformation), leads to nutrients of diet unable to become part of body. As these faculties alltogether convert nutrients to likeness of the cell and body.
- Zoafe quwwate hazima (weakness in power of digestion) with qillate hararat (lack of heat). Attiba justify it as the fact that these two factors may cause haemo-concentration and as a result blood is unable to reach to small capillaries of scalp and hair. In the lack of proper nouritioment hair gets grey (Yaseen, 2002).
- Excess of balghami rutubat (phlegmatic fluids), the temperament of scalp and hair get altered and nouritioment is compromised.
- Infialaate nafsani (psychological stress): psychological conditions like worry, grief, sorrow, stress are potential cause of grey hair (Arzani, 1998).
- Sour food items intake.
- Zoafe umoomi (general debility).
- Asartoo (Aristotle) has mentioned that hair colour is species specific and therefore variation of colour can be seen among different races. He justify his statement by giving examples of peacock and tiger. The specific colour is attributed to their species. Now it has been scientifically proved that colour of hair of a particular species is linked specific genes.



Fig. 2.

www.kci.go.kr

- Rabban tabri sates that hair in anterior portion of the head is affected first than posterior part just like the crops growing in less fertile soil which are weaker than the crops growing in fertile soil (Arzani, 1903).
- According to Jalinoos (galen), Cause of premature greying of hairs is a fungus. He said that anything living or non-living when gets effected by a fungus, it turns white. He also adds that soo-e-mizaje barid (cooling temperament beyond normalency) spoils the nouritioment reching the hairs and provides a soil for fungal infections.
- Zoode hassasiyat (hypersensivity) to some agents. Sometime dyes may also become the cause of greying of hairs in hypersensitive consumers such as sindoor (Yaseen, 2002).

Beside these other causes are Congenital (khilqui), Vitiligo (bars), Alopecia areata (daa us saalab and daa ul hayya). Cause of generalized greying are Vitamin B12 deficiency, Megaloblastic anaemia, Nervous Stress and strain and affections like migraine, Endocrinal disorders e.g., hyperthyroidism, hypopituitarism and Simmonds disease, Albinism and too much exposure to roentgen rays (Shimizu, 2008).

Principles of treatment (Jeelani, YNM), (Anonymous, 1986).

- Istafragh (elimination of morbid material) from head and body. Ayarijaat and muquiyat are useful for this purpose.
- If mizaje ratab is the cause then suitable mujaffifat (dessicants) are used to absorb the excessive secretions.
- Muqawwiyate aam (general body tonic) to nourish the body and hairs.
- Tanqiya e aam (systematic cleansing) with maa ul asal (honey water).
- Treatment of any other underlying cause.

Preparations that prevent premature greying of hairs

- For tanquiya balgham (elimination of morbid phlegm), Aarade turbud (flour of Operculina turpethum Linn) 8 gm, habbul neel biryan (roasted Ipomoea nil Linn. (4gm), post halela zard (Terminalia chebula), zanjabeel (zinjiber officinale), 2 gm each, are taken and all the drugs are grounded, deep fried in roghane badam (almond oil), 14 ml are mixed with crushed maghze badam (almond kernels) (32 pieces) and at the end nabat safed (white sugar) 50 gm is mixed to it. The drug dose is 4-6 gm daily (Jeelani, YNM).



Fig. 3.

- Daily intake of Itriphal sageer halela siyah (Chebulic myrobalan), Halela kaabli (Terminalia chebula) and balela (Terminalia belerica) in equal quantities are taken, crushed and powdered, deep fried in roghane zaitoon (olive oil) and made into itrifal with shahed (honey) for a week every month (Majoosi, 2010).
- Take 1 tablespoon of crushed pomegranate bark and 300ml of coconut oil. Mix it. Boil the mixture for 15-20 minutes. Strained and filtered it. The filtered product can be used as massage over the scalp and wash your head after 20 minutes. It prevents from greying of hair.
- Crush reetha (Sapindus mukorossi) and soak it overnight in water. Strained it and massage your scalp with the filtered mixtures. Wash your head. It is useful both for shining hair as well as preventing of greying of hair.
- Intake of Itriphal kabeer once in a week (Majoosi, 2010).
- Murabba halela in morning daily.
- After two weeks mushile balgham should also given.
- Majoone baladar singly helpful (Saeed, 1997).
- Jawarish jalinoos 5 gm twice daily and eating murabba aamla daily also advisable.
- Aamla (Emblica officianalis), ustukhuddus Lavandula stoechas, zanjabeel (zinjiber officinale), halela siyah (Chebulic myrobalan), nankhwah (*Foeniculum vulgare* Mill.) in equal quantities are taken, crushed and powdered and a dose of 9 gm is advised to take.
- Halela kaabli (Terminalia chebula) 60 gm, khubsul hadeed (iron rust) 12 gm are taken, crushed and powdered and made into majoon with shahed (honey). Majoon dose of 6gm is advised daily.
- Zanjabeel (zinjiber officinale) 3 gm, Gule surkh (rosa damascana L.), barge sana maki (Cassia angustifolia Vahl.), turbud (Ipomoea turpethum R), reewand khatai (Rhum emodi Wall.) 9 gm each, asalus-soos Glycyrrhiza glabra Linn 6 gm, habbul neel Ipomoea nil Linn. Are taken and sugar is added in equal weight. All the drugs are powdered and given 9gm daily (Jeelani, YNM).
- Qurse khubsul hadeed 2 tablets twice daily with 7 gm jawarish jaalinoos is beneficial if taken strictly for 40 days, premature hair greying stops (Saeed, 1997).
- Itrifal sageer 7 gm and sharbat faulad 3 gm also maintain the blackness of hairs (Saeed, 1997).
- Repeated removal of phlegm by vomiting.
- Four gm phitkari (alum) eating daily prevent the hair greying.



Fig. 4.

www.kci.go.kr

Local treatment

Some applications are used to stimulate pigmentation.

- A paste made of curd and sandalwood powder when applied to the scalp helps to cure any kind of fungal infection of the scalp. This paste should be kept applied on hair for 20 minutes (Majoosi, 2010).
- Application of asale baladur (Marking nut honey/Semecarpus anacardium), roghane nakhood (gram oil) in equal quantity.
- Application of joshanda mazoo (decoction of Quercus infectoria) on head.
- Application of Mazoo sokhta (Quercus infectoria), tamba sokhta lead 40 gm, malah indrani salt 2gm. When dried apply this with cotton for 2 hours. Then wash the hairs.
- Application of Paste of kibreet (sulphur) in sharabe kuhna (old alcohol) also act as black dye (Ghani, 2011).
- Boil barge kaner in gadhi milk till the volume reduced to one third of the original.
- Boil barge saroo (Cypressus sempervirens leaves), samar saroo (Cypressus sempervirens fruit), aabe aamla (Emlica officinalis water) in equal quantities in vinegar. Then boil with roghane kunjad (sesame oil). Massage with this oil on hairs and paste of remained matter (sufal) on hairs.
- Boil burada chandi (silver rust) in sirka (vinegar) so that it got dissolved and half of the quantity remains. Apply on hairs.
- Boil Shehm hanzal (Citrullas colocynthus), shooneez (Sesamum indicum) in roghan (oil) and apply it to get black hairs. (Jarjani, YNM)
- Burry Fresh jo (barley) 2 parts,sheeb 1 part in glass bottle. Apply it to black hairs.
- Crush a handful of Jamal gotta leaves (nutmeg or jaiphal), easily available at the raw drug stores), mix them in 250 ml of olive oil and boil for 20 minutes. Filter the oil and massage the scalp at night before going to bed with this luke warm oil (Tabri, 2002).
- Crush a tablespoonful of pomegranate bark and mix it 250 ml of coconut oil and boil for 15 minutes. Massage the scalp with this oil about half an hour before bath and then wash off. This oil prevents premature greying of the hair.
- Dip Barge khubazi in water and keep it in sunlight. Repeat the process of adding leaves again and again for 4 times. Then mix barge hina Lawsonia inermis Linn leaves with alsi (Linum usitatissimum) (Kabiruddin, YNM).
- Dip Khubsul hadeed (iron rust) in sirka (vinegar) angoori upto the level of four fingers. Put on fire till volume reduced to half and wait for two weeks and add halela siyah (Chebulic myrobalan) mashooq and sirka(vinegar) and boil it got the consistency like that of Vaseline. Apply this for one week by adding roghan (oil) to it (Kabiruddin, YNM).
- Get bald and message with oils in which azkhar, taj qalmi (Cinnamomum cassia bark), ood kham (raw agarwood), long (Piper longum) and balchhad are boiled.
- If zeetul zaitoon (olive oil) applied on hairs daily, it prevents greying of hairs.
- In Al qanun fil tibb Galen claims that if the urine of dog is obtained and putrified for five or six days, then it is used. It will blacken the hair and even preserves its blackness (Nafees, 1934).
- Local application of oil prepared from Post Jooz (fresh outer covering of walnut), sazaj hindi (tezpaat/ Cinnamomum tamala azfar ul teeb, hab ul baan (betel nut), badam sherein sokhta (Prunus dulcis Mill) and mazoo (Quercus infectoria) in roghane aas (Myrtle oil) and roghane baan (Betel oil) (Majoosi, 2010).
- Local application of paste of murdaarsang (Monoxidum Plumbi), choona bujha (calx), multani mitti (fullers clay) in water and cover head with leaves of arand (Ricinus communis) before and after washing the hair with warm water (Kabiruddin, YNM).
- Massage with roghane laadan (laadan oil), roghan gul (rose oil) or any available oil.
- Mazoo (Quercus infectoria) 8 gm, sange rasikh 4 gm, naushadar (Ammonium chloride) 2gm, shib-e- yamani (Alum) 1gm are taken. Mazoo (Quercus infectoria) is roasted and mixed with other ingredients powder and put in iron vessel. Hair washing is advised with aabe aamla (Emblica officianalis) and then this paste is applied on hair roots and washed after some time. Finally roghane aamla is applied after drying of hairs. Repeated applications may stimulate the hair pigmentation (Razi, YNM).
- Mix a tablespoon of Brahmi (Bacopa monnieri leaves) paste to a tablespoon of lemon juice and apply this to the scalp for half an hour before bath. This mixture provides good strength to the hair roots and also prevents premature greying (Jeelani, YNM).
- Murdar sang (Letharge), choona (unslaked lime), mitti khalis (pure clay), safeda (Eucalyptus Globulus), qalai (Tin calx) are taken in equal portion and mixed in water to form a uniform paste. This paste is applied over



Fig. 5.



Fig. 6.

www.kci.go.kr

affected area for around 3 hours. Finally hair are washed with loabe hulba (*Trigonella Foenum-graecum*). Repeated applications may stimulate the hair pigmentation (Baitar, YNM).

- Nohas sokhta (burnt cupper), kateera (Tragacanth gum; 17.5 gm each, namak e indrani (black salt) 7 gm, shibe yamani (alum 3.5 gm) are taken and triturated like kohal. All ingridients powdered and mixed in water to form a uniform paste and kept for 4 hours. This is a natural black dye. (Jarjani, YNM)
- Oily khizab (dye) for black dye: barge aam (magnifera indica leaves) 250 gm, maazu (Quercus infectoria), buraada faulad (iron dust) 35 gm each, anar tursh (pomigranate) 250 gm, til oil (sesame oil) 750 gm. Ingredients are powdered and mixed in oil and buried in dung cake for 40 days. Then the oil is applied to black the grey hairs.
- Onion juice has a rich content of the enzyme Catalase which helps reverse graying. Regular application can help darken your hair from the roots.
- Paste of hina (Lawsonia inermis Linn) in aabe qaranfal (Syzygium aromatcum water) make the hair black .(Rushd, 1987)
- Paste of Nariyal (Cocos nucifera) with its root act as black dye for hairs.
- Roast Halela siyah (Chebulic myrobalan) 60 gm, zanjabeel (Zingeber officinalis), nankhwah (Trachyspermum ammi) 40 gm in ghee and take with batasha (Hubal, 2004).
- Roast the barley (Jo) and apply the powder in hairs (Kabiruddin, YNM).
- Sage leaves (salvis or sefakuss in Hindi), are one of the most effective herbal remedies for gray hair. It restores the natural color of the hair and prevents the growth of gray hair. Sage is known for its ability to reverse graying while darkening hair (Qamri, YNM).
- Shiqaiq un numan, flowers or leaves of baqla (Vicia faba) are admixed with roghane kunjad (sesame oil) and applied over hair in the form of paste (Majoosi, 2010).
- Soak halela siyah (Chebulic myrobalan), khubsul hadeed (iron rust), aamla (Emlica officinalis) in sirka angoori (grapes vinegar) for a month. Drain and boil in roghan until it thickens.
- Sumbul ut teeb (Nardostachys jatamansi DC) is boiled in alcohol and then grounded to make a thin paste. Repeated applications may stimulate the hair pigmentation.
- The Ribbed gourd is another vegetable that is known for its ability to restore the pigment cells in your hair follicles.
- Tukhme Hulba (Trigonella foenum graecum Linn/ Fenugreek seeds) contain lecithin and essential amino acids which curb premature graying (Qamri, YNM).
- Wasma (indigofera tinctoria), barge neel (Indigofera tinctoria leaves) each 50 gm, hina khushk 8 gm mixed in decanted water of aamla (Emblica officianalis) and allow to ferment. Add satt leemoon (lemon/ *Citrus limon* (L.), satt imli (Tamarindus indica) to it and allow to remain it in sun for 2 hrs. the paste is advised to dye the hairs. Barge baid injeer (Ficus carica leaves) or barge paan (betel leaves) is advised to tie and cover the hairs for 4 hr to retain moisture and humidity to take more and more results of the dye (Nafees, 1934).

Regimen

- Take high protein diet specially animal sources diet and roasted meat.
- Diet containing milk or milk products can cause excessive production of phlegm is to be avoided.
- Avoid fat rich special diets sareed (bread soacked in broth), assayed (bread made with ghee), hareesa(dish made with wheat and meat), halwa (poridge) etc.
- Avoid excessive coitus.
- Regular supple with vitamin b 12 and iron.
- Avoid consumption of chilled water and drinks.
- Frequent shaving of scalp.
- Application of suitable oil.
- Sour foods, venesaction and sex should be avoided.

Khizabaat (Hair dyes)

Hair Dyes are used either to hide gray hair or to change the color of the hair. External treatment to canities (sheeb) and poliosis

Table 1. Botanicals, chemical constituent and uses of some dyeing agents of Unani medicine

S. No.	Unani Name/ Botanical name/ Family	Chemical constituents	Uses
1.	Aas/ *Myrtus communis / Myrtaceae*/	The leaves contain tannins (pyrogallol derivative), flavonoids (including myricetin with kaempferol and quercetin glycosides; volatile oil containing alpha-pinene, cineole, myrtenol, nerol, geraniol and dipentene. Phenolic compounds, and anthocyanins are the major phytochemicals. Seeds yield 12- 15% of a fatty oil (fixed oil) consisting of glycerides of oleic, linoleic, myristic, palmitic, linolenic and lauric acid (Khare, 2007).	Seeds are soaked in water and applied to hair in paste form blackens and strengthens the hair. Roghane aas is hair growing oil due to stimulant action on scalp. (Ghani, 2011)
2.	*Adiantum capillus* /Pteridaceae/ Parsiyaoshan (Dymock W, Warden C.J.H and Hooper D. 2005)	Nine new compounds were identified in the twenty-two isolated triterpenoids. 4a -hydroxyfilican- 3-one and fern-9 (11) en-12b –o and oleanane triterpenoids; olean-12en-3-one and olean-18-en-3-one19. Four triterpenoidal compounds belonging to adiantane and filicane groups, isoadiantone; isoadiantol-B; 3-methoxy-4-hydroxyfilicane and 3,4-dihydroxyfilicane, from the hexane fraction and three flavonoids from the ethyl acetate fraction as: quercetin, quercetin-3-O-glucoside	The whole plant is used as a hair tonic. Two kinds of Adiantum, "white" and "black," used in making hair oil. Along with vinegar and olive oil it is useful in alopecia and with the oil of Habbul Aas it is useful in maintenance of hair colour and hair loss (Khare, 2007; Qashmi, YNM).

www.kci.go.kr

		and quercetin-3-O-rutinoside (rutin) (Ahmed et al., 2012).	
3.	*Akhrot/ Juglans regia/ Juglandaceae*	Oleic acid, macadamia, linoleic acid, linolenic acid, methionine, cysteine, tryptophan, threonine (Chopra et al., 2002; Khare, 2007).	Leaves and hull of fruits is used for hair dyeing (Chopra et al., 2002).
4.	Amla *Phyllanthus emblica /Euphorbiaceae*	Gallic acid, ellagic acid, 1-O-galloyl-beta-D-glucose, 3, 6-di-O-galloyl-D-glucose, chebulinic acid, quercetin, chebulagic acid, corilagin, 3-ethylgallic acid (3-ethoxy-4, 5-dihydroxy-benzoic acid), isostrictiniin, 1, 6-di-O-galloyl-beta-D-glucose, vitamin C (Kokate et al., YNM).	Amla has antioxidant properties both of which help preserve the melanin in your hair follicles. This slows down the graying process. It strengthens hair roots and makes it black. It is soaked and boiled and filtered to get a decoction which is used to wash hair to make hair strong and lengthy and make hair black, it is used along with henna to dye hair (Hakeem, 2002; Khare, 2007).
5.	*Baalchhar/ Sambul-utTeeb,/ Valeriana jatamansi / Caprifoliaceae*	D nardostachone, valeranone and jatamansone as the major ketonic sesquiterpenes, Jatamansone semicarbazone, a sesquiterpene ketone (Evans, 2005).	It isusedin hair oil for arresting hair loss and greying ofhair (Khare, 2007).
6.	Berg-e-saru *Casuarina equisetifolia/ Casuarinaceae/*	Essential oil, Penta decanal, caryophylline oxide, trans-linalool oxide (Prabhu and Bhute, 2012).	When applied with mehandi and sirka it makes hair black and strengthens hair roots. Washing hairs with decoction of fruit and leaves of Saru helps in blackening of hairs. It is used as a natural dye.
7.	Bhangra/ *Eclipta alba/ Asteraceae*	The leaves contain stigmasterol, α-terthienylmethanol, wedelolactone, dismethylwedelolactone and dismethylwedelolactone-7-glucoside. The roots give hentriacontanol and heptacosanol. The roots contain polyacetylene substituted thiophenes. The aerial part is reported to contain a phytosterol, β-amyrin in the n-hexane extract and luteolin-7-glucoside, β-glucoside of phytosterol, a glucoside of a triterpenic acid and wedelolactone in polar solvent extract. The polypeptides isolated from the plant yield cystine, glutamic acid, phenyl alanine, tyrosine and methionine on hydrolysis. Nicotine and nicotinic acid are reported to occur in this plant (Rao et al., 2008).	Whole plant extract is useful for hair‟s nourishment and dyeing. It is also a constituent of “Roghan Amla Khas” for applying on the hair and of “Majun Murrawah-ul-arwah”. medicinal plant book 32
8.	Carthamus tinctorius/ Asteraceae/ Safflower Oil	Has one of the highest linoleic acid contents of all known oils, giving it superior skin compatibility and deep moisturizing capability since the moisture content of the skin is proportional to the content of essential unsaturated fatty acids (Khare, 2007).	Safflower Oil is used in creams, lotions and soaps to soften the skin and in hair conditioners (Khare, 2007).
9.	Chai/ Black tea/ Melaleuca alternifolia/ Myrtaceae/	Phenols, flavonoids, gallic acid, rutin, catechin, epicatechin, epigallocatechin, epigallocatechin-gallate, epicatechingallate, gallic acid and caffeine (Khare, 2007).	Well known for antibacterial and antifungal properties. oily scalp irritation and rashes. Black tea stains hair, darkening it. It also adds shine to your hair, making it an excellent remedy for reviving dull, lifeless hair.
10.	Chaliya/ *Areca catechu*	The polyphenol, mostly flavonols, include catechin, epicatechin, leuco-cyanidin, the remaining portion being complex flavonoids. A series of dimeric, trimeric, and tetramertic procyanidins has been isolated from seeds. The four major alkaloids isolated in arecanut are arecoline, arecaidine, guvacoline and guvacine. Arecanut fatty acid profile are lauric acid, myristic acid, palmitic acid, stearic acid, decanoic acid,oleic acid, dodecenoic acid, tetradecenoic acid and hexadecenoic acid. The mineral matter includes calcium, phosphorus and iron. It also contains Vitamin B6 and Vitamin C (Amudhan and Begum, 2012).	It is used from very dark to light brown colouring (Amudhan and Begum, 2012).
11.	chameli *Anthemis nobilis/ matricaria chamomillae*	Apeginin (1, 3, 4 tri-hydroxy-flavone), Sesquiterpenes, flavonoids, coumarins, and polyacetylenes (Gediya et al., 2011; Rastogi and Mehrotra, 1999).	Chamomile tea has hair darkening properties, and with regular use, it can mask gray hair over time (Hakeem, 2009).
12.	Clary Sage/ Salvia sclarea /Lamiaceae/	Essential Oil contains substances said to have an estrogen-like effect.	It has a vitalizing effect on scalp and dandruff control; peels off dead skin.
13.	Coffee/ *Coffea Arabica L./ Rubiaceae/*	The aroma components include several furfuryl methyl mercaptan derivatives. Coffee extracts yielded organic	Coffee is not a permanent solution for gray hair. However, with regular

www.kci.go.kr

		acids. Atractyloside, several sterols and acids, as well as alkaloids, have been reported. Caffeine is the major alkaloid of coffee. One cup of coffee contains caffeine; other active constituents include chlorogenic acid, caffeol and diterpenes. Chlorogenic acid (Mallya and Ravikumar, 2015).	use, it can stain your hair to a dark brown color and mask all of your grays.
14.	Gurhal/ China rose/ *Hibiscus rosa-sinensis Linn./ Malvaceae*	Calcium, phosphorus, iron, vitamin B1, riboflavin, niacin and vitamin C. Cyclopropanoids, methylsterculate, malvalate, β-sitosterol, amino acids (Chopra, 2002). The plant contains the cyclo-propanoids, methyl sterculate,methyl-hydroxy sterculate, hydroxy- sterculate, malvalate and beta-sitosterol. The major anthocyaninin the flower is cyanidin sophoroside. The flower nectar is rich in amino acids, mainly aspartic acid and asparagin (Khare, 2007).	Used to stimulate thicker hair growth and prevents premature graying of hair (Nadkarni, 2005).
15.	Henna *Lawsonia inermis Lythraceae*	Dye molecule called Lawsone(2 hydroxy 1,4–nephthquinone), Lalioside, lawsoniaside, uteolin-7-O-β-d-glucopyranoside, awsonicin, lawsonadeem, vomifoliol (Reza et al., 2015).	Henna is a natural dye that also possesses antifungal and antibacterial properties. It also restores the pH balance of the scalp and normalizes oil production. Leaves paste is used for hair dyeing and nourishment, shine enhancer and as a smoothening agent. Henna has a natural affinity with the proteins in our hair, making it able to "stain" the colour onto the hair shaft. It cannot be dyed over means once dyed with hina, other chemical cannot enter the shaft. Colour obtained is relatively stable. It is neither a primary irritant or sensitizer.
16.	Kalonji/ Black Cumin/ Nigella sativa/ Ranunculaceae	The essential oil from seeds contains nigellone and methyl-isopropyl-p quinone. The oil contains carvone, d-limonene and cymene. Seeds contain fatty acids including palmitic, myristic, stearic, oleic, linoleic and linolenic.Beta-sitosterol is also present in the seeds.	For Premature Greying, Scrub the scalp thoroughly with lemon; leave it for fifteen minutes & shampoo. After getting dried apply kalonji oil to whole scalp, continue for six weeks (Kabeeruddin, YNM).
17.	Kuth/ *Saussurea lappa C.B/. Asteraceae*	P-hydroxybenzaldehyde, ethyl 2-pyrrolidinone-5(s)-carboxylate, 5-hydroxymethyl-furaldehyde, palmitic acid, succinic acid, glucose, daucosterol, beta-sitosterol (Yadav R et al., 2014).	Roots extract is used in hair dyeing.
18.	Ladan/ *Cistus kereticus risaina* / Cistaceae/	Monoterpenes, Oxygenated Monoterpenes, Sesquiterpenes, Oxygenated Sesquiterpenes, Diterpenes, Labdane Diterpenes, Aldehydes, Alkanes, Esters, Fatty Acids, Ketones.	Blackening of Hair.
19.	Aam/ Kairi / *Magnifera indica* /Anacardiaceae	Mangiferin(1,3,6,7-tetra-hydroxy-xanthone-C-2-β-D-glucoside) was the chemical responsible for providing color from mango leaves (Khare, 2007)..	Carry leaves restore the melanin in your hair follicles which help tackle graying (Khare, 2007).
20.	Mazu/ *Quercus infectoria* / Fagaceae	The fruits gave a mentoflavone hexamethyl ether, isocryptomerin and beta-sitosterol. The bark contains tannins consisting of phlobatannin, ellagitannins and gallic acid. The galls contain gallo tannic acid, gallic acid ellagic acid, nyctanthic acid, rubric acid, besides sugars, starch, an essential oil and anthocyanins. Galls were also found to contain beta-sitosterol, amentoflavone, hexa-methyl ether and isocryptomerin (Khare, 2007).	Gallotannin, ellagic acid, starch and glucose. Dye stuff in the tannin is ellagic acid (Nadkerni, 2009).
21.	Mirch siyah/ Black pepper Piper nigrum / Piperaceae	The fruit yielded piperine, piperatine and piperidine; amides, piperyline, piperoleins A and B, and N-isobutyl-cicosa-trans-dienamid (Khare, 2007).	With regular use, black pepper can darken gray hair (Nadkerni, 2009).
22.	Zaitoon/ *Olea europaea* /Oleaceae	Oleuropein, oleasterol, leine. Olive oil contains 75% oleic acid, monounsaturated fatty acid, flavonoids, triterpenes, vitamin E (Khare, 2007).	Prevent hair graying,
23.	Post Balela *Terminalia bellirica*/ Combretaceae	Tryptophan, threonine, phenyl-alanine, tyrosine, termilignan, thannilignan, together with 7 hydroxy-3, 4-(methylenedioxy) flavan, anolignan B (Khare, 2007).	Seed extract and oil is good for hair dyeing preparation (Nadkerni, 2009).
24.	Post Halela zard/*Terminalia chebula / Combretaceae*	Arjunolic acid; terminolic acid; chebuloside I, II; triterpenoids; triterpenoid glycosides (Nadkerni, 2009).	Seed extract is used in hair care formulations (Nadkerni, 2009).

www.kci.go.kr

25.	Post Sumaq *Rhus coriaria*/ Anacardiaceae	ellagic acid, gallic acid, iso-quercitrin, myricitrin, myricetin, quercetin, quercitrin and tannic acid. It afforded three new aromatic compounds identified as 1-methoxy-4-hydroxy- methylene naphthalene (coriarianaphthyl ether), 7-methoxy-5-methyl benzene-4-al-oic acid (coariariaoic acid) and 1-dodecanoxy-2,8-dihydroxy-anthracene-15oic acid (coriarianthracenyl-ester) along with known phytoconstituents n-tetracosane, n-pentacosane, anise alcohol, p-hydroxy benzyl alcohol, methyl lawsone and 2- hydroxyl methylene naphtha-quinone (Rayne, 2008).	The Joshanda of Sumaq is used for black and shining hairs (Ali, 2004).
26.	Anaar tursh/ *Roomaan, Gulnaar Farsi/ Punica granatum / Punicaceae*	The fruit rind (dried) contains tannin. The rind gave an ellagitannin (granatin B, leaves gave granatins A and Bandpunicafolin); punicalagin, punicalin and ellagic acid. Pentose glycosides of malvidin and pentunidin have also been isolated from the rind. Seeds gave malvidin pentose glycoside. Flowers gave pelargonidin-diglucoside; also sitosterol, ursolic acid, maslinic acid, asiatic acid, sito sterol beta-D-glucoside and gallic acid.	Yellowing and reddening of hair.
27.	Gul-e-Surkh, Vard, Varde-Ahmar. Samar-e-Gul/ *Rosa damascene / Rosaceae*	Quercetin, kaempferol and cyanidin. Lycopene, rubixanthin, zeaxanthin, xanthophylls and taraxanthin have been isolated from the hips. The flowers contain an essential oil with citronellol, nerol, geraniol, beta-phenylethanol and its glucoside, eugenol and methyl eugenol; other constituents include organic acids, chlorogenic acid, tannin, cyanin, cyanidin and its diglucoside, quercitrin, carotene and sugars. Pollen from flowers contain carotene, sugars and chlorogenic acid. The red colouring matter consists of cyanin; a yellow glucoside of quercetin and quercitrin is also present. Flowers, usually, yield oil or otto of rose (Khare, 2007).	The red colouring matter consists of cyanin which provide red colour on dyeing with this herb (Nadkerni, 2009).
28.	Sanobar ki Daadhi / *Pinus longifolia Roxb./ Pinaceae*	The essential oil from oleoresin contains chiefly alpha- and beta-pinene; careen and longifoline.	Bark has tannins and colouring matter which is used for maintaining blackness of hair.
29.	Sarson/ Mustard/ Brassica spp. / Brassicaceae	Quercetin, predominate, kaempferol, luteolin, apigenin indole-3-carbinol (Khare, 2007).	Seed oil is used as hair oil and useful for hair nourishment and helps in stopping greying of hairs (Nadkerni, 2009).
30.	Senduria or Annato *Bixa orellana* / Bixaceae	Apocarotenoid bixin, lutein, xanthin, zeaxanthin,methylbixin (Khare, 2007). ,	Seed containing orange red colouring matter is used as dye known as annatto dye (Nadkerni, 2009).
31.	Tabasheer/ *Bambusa arundinacea/ Graminae*	Phenolic acids, Flavonoids, tannins, cyanogenic glucosides, glucosinates, thiosinates, oxalic acids, reducing sugar, waxes. Protein namely glutiline, lysine, methionine, betane, choline, arginine,isolucine,riboflavin, thiamin (Khare, 2007).	Flavonoids inhibit enzymes directly involved in oxidative processes. Used for Photo protection and hair protection properties (Nadkerni, 2009).
32.	Til/ *Sesamum indicum/ Pedaliaceae*	Latifonin, momor-cerebroside, soya-cerebroside II, benzyl alcohol-O-(2'-O-beta-D-xylopyranosyl, 3'-O-beta-D-glucopyranoside)-beta-D-gluco-pyranoside, beta-sitosterol, dauco-sterol, D-galacititol (Nadkerni, 2009).	Seed oil is one of the major sources of hair oils, which is used as such or a base for preparing specific hair oils (Kabiruddin, YNM).
33.	Wasma/ Indigofera tinctoria Linn. / Fabaceae	A blue dyestuff is obtained from the indigofera which does not exist ready formed, but is produced during fermentation from another agent existing in the plant, known as indocan. An artificial product indigotine is manufactured chemically and used as a substitute. Indirubin is another component of the plant. Indigo, the dye extracted from the leaves, contain Indicine and the flavonoids, apigenin, kaempferol, luteolin and quercetin. The presence of coumarins, cardiac glycosides, saponins and tannins (Van et al., 2004).	Used to give bluish tint to hairs either to hide grey hairs or for grooming purposes. Repated application give desired results. It is also a soothing balm for burns and scalds, insect stings and animal bites (Khare, 2007).

www.kci.go.kr

(qillat loan ul shaar) is the use of khizabat (hair dye). Author of Zakheera khawazam shahi mentioned khizab into three types according to colour black, blond and white. According to physical form solid, semi solid and liquid- oily dyes. Hair dyes classification according to source of origin are Vegetable e.g., Henna and Metallic e.g. Lead dyes, Bismuth dyes, Silver dyes, Copper, nickel, cobalt salts (Naishadham et al., 2013).
An ideal hair dye should have following properties: (Anita et al., 2012).

- Nontoxic to the skin or hair, should not impair natural gloss and texture.
- The color imparted must be stable.
- Should not be a dermatitic sensitizer.
- Should be easy to apply.

Classification of dyes (khizabaat)

Hair dying systems can be divided into two main categories, oxidative or non-oxidative, and also according to the color durability after the application on hair strands: temporary, semi-permanent, demi-permanent and permanent. Among the various options of hair dyes, it is interesting to know the application features and their affinity for the hair fibers in order to select the best option for each hair type and to provide a satisfactory effect, as a good covering power of gray/white hair, good color resistance to shampoo washes, and high durability of color (Sagarin and Balsum, 2002).
Major Classification of Khizabaat in Unani Medicine: According to the colour acquired after dye.

Black dye preparations (Musawwid Shaa'r)

- First fry mazoo (Quercus infectoria) with roghane zaitoon (olive oil) and put it into powder form. Later Misk sokhta (Moschcus moschiferus secretion), Namak lahori (black salt), phitkari (alum), mehandi (Lawsonia inermis) are mixed with powdered mazoo (Quercus infectoria) and its paste is prepared in decoction of barge moorad (myrtus communis) (Qamri, YNM).
- Shiqaiq un numan, flowers or leaves of baqla (Vicia faba) are admixed with roghane kunjad (sesame oil) and applied over hair in the form of paste (Majoosi, 2010).
- Local application of oil prepared from Post Jooz (fresh outer covering of walnut), sazaj hindi (tezpaat/ Cinnamomum tamala azfar ul teeb, hab ul baan (betel nut), badam sherein sokhta (Prunus dulcis Mill.) and mazoo (Quercus infectoria) in roghane aas (Myrtle oil) and roghane baan (Betel oil) (Majoosi, 2010).
- Local application of paste of murdaarsang (Monoxidum Plumbi), choona bujha (calx), multani mitti (fullers clay) in water and cover head with leaves of arand (Ricinus communis) before and after washing the hair with warm water.Massage with roghane laadan (laadan oil), roghan gul (rose oil) or any available oil.
- Nohas sokhta (burnt cupper), kateera (Tragacanth gum; 17.5 gm each, namak e indrani (black salt) 7 gm, shibe yamani (alum 3.5 gm) are taken and triturated like kohal. All ingridients powdered and mixed in water to form a uniform paste and kept for 4 hours. This is a natural black dye (Jarjani, YNM).
- Wasma (indigofera tinctoria), barge neel (Indigofera tinctoria leaves) each 50gm, hina khushk 8gm mixed in decanted water of aamla (Emblica officianalis) and allow to ferment. Add satt leemoon (lemon/ *Citrus limon* (L.), satt imli (Tamarindus indica) to it and allow to remain it in sun for 2 hrs. the paste is advised to dye the hairs. Barge baid injeer (Ficus carica leaves) or barge paan (betel leaves) is advised to tie and cover the hairs for 4 hr to retain moisture and humidity to take more and more results of the dye.
- Boil barge kaner in gadhi milk till the volume reduced to one third of the original.
- Application of Mazoo sokhta (Quercus infectoria), tamba sokhta lead 40 gm, malah indrani salt 2gm. When dried apply this with cotton for 2 hours. Then wash the hairs.
- Roast the barley (Jo) and apply the powder in hairs (Kabiruddin, YNM).
- Dip Khubsul hadeed (iron rust) in sirka (vinegar) angoori upto the level of four fingers. Put on fire till volume reduced to half and wait for two weeks and add halela siyah (Chebulic myrobalan) mashooq and sirka(vinegar) and boil it got the consistency like that of Vaseline. Apply this for one week by adding roghan (oil) to it.
- Application of asale baladur (Marking nut honey/Semecarpus anacardium), roghane nakhood (gram oil) in equal quantity.
- Roast Halela siyah (Chebulic myrobalan) 60 gm, zanjabeel (Zingeber officinalis), nankhwah (Trachyspermum ammi) 40 gm in ghee and take with batasha (Hubal, 2004).
- Dip Barge khubazi in water and keep it in sunlight. Repeat the process of adding leaves again and again for 4 times. Then mix barge hina Lawsonia inermis Linn leaves with alsi (Linum usitatissimum).
- Paste of hina (Lawsonia inermis Linn) in aabe qaranfal (Syzygium aromatcum water) make the hair black (Rushd, 1987).
- Paste of Nariyal (Cocos nucifera) with its root act as black dye for hairs.



Fig. 7.



Fig. 8.

www.kci.go.kr

- Burry Fresh jo (barley) 2 parts,sheeb 1 part in glass bottle. Apply it to black hairs.
- Application of joshanda mazoo (decoction of Quercus infectoria) on head.
- Boil burada chandi (silver rust) in sirka (vinegar) so that it got dissolved and half of the quantity remains. Apply on hairs.
- If zeetul zaitoon (olive oil) applied on hairs daily, it prevents greying of hairs.
- Soak halela siyah (Chebulic myrobalan), khubsul hadeed (iron rust), aamla (Emlica officinalis) in sirka angoori (grapes vinegar) for a month. Drain and boil in roghan until it thickens.
- Application of Paste of kibreet (sulphur) in sharabe kuhna (old alcohol) also act as black dye.
- Boil Shehm hanzal (Citrullas colocynthus), shooneez (Sesamum indicum) in roghan (oil) and apply it to get black hairs.
- Oily khizab (dye) for black dye: barge aam (magnifera indica leaves) 250 gm, maazu (Quercus infectoria), buraada faulad (iron dust) 35 gm each, anar tursh (pomigranate) 250 gm, til oil (sesame oil) 750 gm. Ingredients are powdered and mixed in oil and buried in dung cake for 40 days. Then the oil is applied to black the grey hairs.
- In Al qanun fil tibb Galen claims that if the urine of dog is obtained and putrified for five or six days, then it is used. It will blacken the hair and even preserves its blackness (Ibne, YNM).

Red hair dye preparations (Muhammare Shaa'r)

- Application of paste of mehandi (Lawsonia inermis) prepared in decoction of kundush (Centipeda minima Linn.) (Jarjani AH, YNM).
- Application of decoction of sumaq (Rhus typhina L.). (Jarjani, YNM)
- Massage with mehandi (Lawsonia inermis), sharab (alcohol), raal (resin), phitkari (alum) and hartaal (auripigmentum, aurum - gold + pigmentum - pigment).
- Mazoo (Quercus infectoria) is roasted in roghane zaitoon (olive oil) till it bursts and powdered and can be used as dye.
- Washing the hairs with decoction of naagarmoth (Cyprus rotundus) and kundush (Centipeda minima Linn).
- Murdaar sang (Monoxidum Plumbi), choona (calx) are soaked in 6 fold water and kept in sun. After three days, water is decanted out and bread is soaked to check if it turns black. Murdaar sang (Monoxidum Plumbi), choona (calx) are 1/6 of total water is again added and again tested with bread. If bread turns black then barge hina (Lawsonia inermis leaves) is added. It act as natural dye (Nafees, 1934).
- Put Fresh walnut in zeet again and again. Apply on hairs by adding phitkari (alum).
- Apply Burnt alcohol, raaseenaj and roghane azkhar on hairs to get red hairs.
- Paste of rasaut (Berberis vulgaris) also make red hairs.
- Application of hina Lawsonia inermis Linn in joshanda kundush (decoction of Centipeda minima Linn.) makes the hair red (Ghani, 2011).
- Paste of Samaq (Rhus coriaria Linn) 60 gm, mazoo (Quercus infectoria) 90 gm, azriyoon zar, hansraj (Adiatum capillaries), turmus muqashar (Lupnus albus) 60 gm, afsanteeen (Artemisia absinthium Linn) 30 gm in water. Apply in hairs and then wash the hairs thoroughly (Kabiruddin, 1996).

White hair dye preparations (Mubayyaze shaa'r) (Jeelani, YNM; Razi, 2005; Shimizu, 2008; Tabri, 2002)

- Zimad of fine powder of banomaash in sirka (vinegar).
- Abaabeel beet (Swallow shit), raasan khushk (Dry Raisins), mash khushk (black lentil pulse/ Vigna mungo L.), nasreen, shagufa kibr (Eurhynchium brittoniae Grout), tukhm mooli (seed of Raphanus sativus Linn) in equal quantities powdered, and add gall bladder of cow and sirka (vinegar) to make a paste. 3-4 hr before application of this paste hairs are treated with gandhak dhooni (sulphur fumes). Rinse the hairs. Again and again repeat the process till all the hairs become white (Nafees, 1934).
- Raasan khushk (Dry Raisins), post mooli khushk (Raphanus sativus Linn.), shibbe yamani (alum) all grinded and add into loabe samage arabi (gum arabic) to make a paste and add chuna (calx), hadtal (auripigmentum) to whiten the hairs (Jeelani, YNM).

Blond hair dye preparations

Samaq (Rhus coriaria Linn.) 2 part, mazoo (Quercus infectoria) 3 part oqia, sooraj mukhi (sun flower) 2 musht, parsiyaoshan(Adiantum capillus-veneris) 2 musht, afsanteen romi (Artemisia absinthium L.), turmus muqashar khushk (dry lupin bean). All powdered and add 10 ratal water. Apply for some days to blond the hairs (Tabri, 2002).

- Joshanda kundush (decoction of Centipeda minima Linn.)



Fig. 9.



Fig. 10.

www.kci.go.kr

and joshanda naagarmotha (decoction of Cyprus rotundus) blond the hairs (Razi, 2005).

- Dip Samaq (Rhus coriaria Linn.) 60 gm, mazoo (Quercus infectoria) 200 gm, haldi, zafran (Crocus sativa gynacium) 60 gm,sharul nanazir 30 gm,turmus 90 gm in water in glass vessel. Allow it to dry and then apply it on hairs. Wash with luke warm water.
- Application of Paste of burada loha (iron rust) in water for 2-3 hrs makes the hair golden (Baitar, YNM).

CONCLUSION

Hair dyes industry is expanding its business in multi billions annually inspite of harmful chemicals contained in these dyes. Synthetic dyes are not only expensive which cannot be afforded by poor people but also very harmful sometimes. So, herbal dyes, which are almost available with a very low expenses are a great help. Synthetic dyes may contain ingredients whose safety is unknown or which are known to create health risks. Regulatory aspects should also not to be ignored. Before marketing of hair dyes some basic quality control test should also be performed. Knowing gross mechanism of action of Unani drugs along with knowledge of structure and function of hair and mechanism of drug are the key points in Unani dye technology. Unani system however in present date inattractive and lacks consumer compliance, cosmetic product formulations, official quality control for products. Thus, this is need of the hour to prepare Unani hair dyes by using those drugs which are easily available and proven as gold standard drugs for hair care mentioned in classical Unani literature and perform their scientific evaluation. The production of the product would be cost effective with multipurpose qualities. The present review focuses on the potential of herbals for dyeing purposes and in the treatment of hair greying. Unani medicine has the potential of generating herbal Unani dyes which can eleviate the system.

ACKNOWLEDGEMENTS

None.

CONFLICT OF INTEREST

Author have no conflicting financial interests.

REFERENCES

Ahmed A, Jahan N, Wadud A, Imam H, Bilal A. Physicochemical And Biological Properties Of Adiantum Capillus-Veneris Linn: An Important Drug of Unani System of Medicine. International Journal of Current Research Review. 2012;4:70.

Almaseehi ASIBYI. Kitabul Miat. Urdu translation CCRUM. Part 1st (New Delhi, India: Ministry of H and FW, Govt. of India), 2008.

Amudhan MS, Begum VH. A Review on Phytochemical and pharmacological potential of Areca Catechu L. Seed. IJPSR. 2012;3:4151-4157.

Anita S. Wanjari, S. Bhutada, Jadhao S, Desa P. Formulation & Evaluation of herbomineral natural hair colorant. 5th World Ayurveda Congress 2012 Bhopal, Madhya Pradesh, India. 7-10 Dec 2012. PA01.05.

Anonymous. Qabadeen-e- Majeedi. 9th ed. (New Delhi, India: All India Unani Tibbi Conference), 1986.

Arzani A. Tibbe Akbar. (Deoband, India: Faisal Publication), 1903.

Arzani H A. Qarabadeen Qadri. (New Delhi, India: Aijaz Publishing House), 1998.

Baitar I ZABA. Al Jameul Mufradat lil Advia wal Aghzia. (New Delhi, India: CCRUM). YNM.

Begum F and Idris M. Unani cosmeceutical formulations (Advia-E-Muzayyana): An overview. International Journal of Herbal Medicine. 2016;4:162-167.

Bhat AM and Qureshi AA. Significance of Personal Hygiene from Islamic Perspective. IOSR Journal of Humanities and Social Science. 2013;10:35-39.

Kokate CK, Purohit AP, Gokhale SB. Pharmacognosy. 13th ed. (New Delhi, India: Nirali Prakashan), 2002.

Chopra RN, Nayar SL, Chopra IC. Glossary of Indian Medicinal Plants. (New Delhi, India: Published and Printed by National Institute of Science communication and Information Resources (CSIR)), 2002.

Dymock W, Warden CJH, Hooper D. Pharmacographia Indica: A History of the principal drugs. Vol. I. (New Delhi, India: Srishti book distributors), 2005.

Evans WC. Trease and Evans Pharmacognosy. 15th ed. (New Delhi, India: Elsevier), 2005.

Gediya SK, Mistry RB, Patel UK, Blessy M, Jain HN. Herbal Plants: Used as Cosmetics. Scholars Research Library Journal of Natural. Production of Plant Resource. 2011:1:24-32.

Ghani N. Khazainul Advia. 3rd ed. (New Delhi, India: Idarah Kitabul Shifa Delhi), 2011.

Hakeem MA. Bustan al Mufradat. (New Delhi, India: Idara Kitab Al-shifa), 2002.

Hakeem MAH. Mufradat Azeezi. CCRUM. (New Delhi, India: Mehar graphics), 2009.

Hakeem Syed Safi-Uddin Ali. Unani Adviya Mufarrada. (New Delhi, India: Unani Adviya Mufrada), 2004.

Hubal I. Kitabul Mukhtarat Fil Tibb. Urdu translation by CCRUM. Part. 2nd. (New Delhi, India: Ministry of H and FW, Govt. of India), 2004.

Ibne Sina. Al Qanun Fil Tibb. Book V. English translation of the critical Arabic text. (New Delhi, India: Department of Islamic studies. Jamia Hamdard), YNM.

www.kci.go.kr

Jarjani AH. Zakhira e Khawarizm Shahi. vol. 8. (New Delhi, India: Idara E Kitabushifa), YNM.

Jeelani HG. Makhzanul Ilaj. vol. 2. (New Delhi, India: Idarae Kitabushifa), YNM.

Kabeeruddin, Byaaz E Khas. (New Delhi, India: Aijaz Publications), YNM.

Kabiruddin H. Beyaze Kabir. (New Delhi, India: Published by Hikmat book depo Hyderabad Dakan), p. 154, YNM.

Kabiruddin H. Khawasul advia. (New Delhi, India: Published by Aijaz publishing house), YNM.

Kabiruddin M. Makhzanul-Mufradat. (New Delhi, India: Published by Idarah Kitabul Shifa), YNM.

Kapoor VP. Hair Cosmetics for Skin and Hair care, National Institute Of Botanical Researches, Lukhnow. 2005;4:306-314.

Khan A. Qarabadeen Azam. Urdu translation by Hasrat. (New Delhi, India: Ejaz Publishing House), 1996.

Khare CP. Indian Medicinal Plant: An Illustrated Dictionary. 1st ed. (New Delhi, India: Raj Kamal Electric Press), 2007.

Majoosi ABA. Kamilus Sanaa. Urdu trans. by Kantoori GH. vol. I & II. (New Delhi, India: New Delhi: Idara Kitab-us-Shifa), 2010.

Mallya R, Ravikumar P. Formulation and evaluation of natural hair colorants. Int J Pharm Pharm Sci. 2015;7:347-349.

Nadkerni. The Indian Materia medica. vol. 1. (New Delhi, India: Bombay popular prakashan), 2009.

Nafees I. Kulliyate Nafeesi. Urdu Trans. By Kabeeruddin M. (New Delhi, India: IdaraKitab-us-Shifa), 1934.

Naishadham P, Sushma PR, Dasika R, Tangirala S. Evaluation of Organic Hair Dye Formulation by an Environment Friendly Process. Int J Pharm Sci Rev Res. 2013;21:152-157.

Prabhu.KH, Bhute AS. Plant based natural dyes and mordnats: A Review. Scholar Research Library. Journal of Natural Production Plant Resource. 2012;2:649-664.

Qamri AMH. Ghana Mana. (New Delhi, India: CCRUM), YNM.

Qashmi IA. (New Delhi, India: Kitabul-Mufradat Published by International printing press Aligarh), YNM.

Radhika D, Mohan KVM, Sreenivasulu M, Reddy YS, Karthik TS. Hair Dye Poisoning-A Clinicopathological Approach and Review. J Biosci Tech. 2012;3:492- 497.

Rao YM, Shayeda, Sujata P. Formulation and evalution of commonly used natural hair colorants. Natural product radiance. 2008;7:45-48.

Rastogi RP, Mehrotra BN. Compendium of Indian Medicinal Plants. vol. 1. (New Delhi, India: Central Drug Research Institute, Lucknow and National Institute of Science Communication), 1999.

Rayne S. Chemical profiles of essential oils and non-polar extractable from sumach a mini-review. Elec J Plant Food Chem. 2008;3:5-9.

Razi ABMZ. Kitab al Hawi. Chapter 27. (New Delhi, India: CCRUM), 2005.

Reza P, Gonbad A, Afzan A, Karimi E, Sinniah UR, Swamy MK. Electronic Journal of Biotechnology. 2015;18:433-438.

Rukangira E. The African Herbal Industry: Constraints and Challenges “Erboristeria Domani”, August 2001. CA 109/04/11.

Rushd I. Kitabul-Kulliyat. (New Delhi, India: Urdu translation Central Council for Research in Unani Medicine, Ministry of Health and Family Welfare Govt. of India), 1987.

Saeed M. Hamdard Pharmacopoeia of Estern Medicine ed. 2nd ed. (New Delhi, India: Sri Satguru publications), 1997.

Sagarin E, Balsam MS. Cosmetics Science and technology. 2nd ed. (New Delhi, India: Wiley Interscience publishers), 2002.

Sharma S. Chemical aspect of hair dyes or colors (a review). Paripex - Indian Journal of Research. 2015;4:1-5.

Shimizu H. Shimizu's Textbook of Dermatology. (Hokkaido, Japan: Hokkaido University Press/Nakayama Shote), 2008.

Tabri AR. Firdausul Hikmat. Urdu trans. by Hakeem MA Shah. (Deoband, India: Faisal Publication), 2002.

U.S. Department of Health and Human Services, Office on Women’s Health http://www.womenshealth.gov 1-800-994-9662 TDD: 1-888-220-5446 (accessed on 05th May 2018).

Van BE, Wayk, Wink M. Medicinal plants of the World. (Portland, USA: Timber Press), 2004.

Yadav R, Yadav Nita, Kharya MD. Research Journal of Pharmaceutical, Biological and Chemical Sciences. Development and Evaluation of Polyherbal Formulation for Hair Colorant. 2014;5:901-907.

Yaseen AHM. Amraze Jild. (Malegaon, India: Danish offset press), 2002.

www.kci.go.kr