

MANJISTHA IN HERBAL COSMETICS: A REVIEW

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ABSTRACT

Beauty is the desire of every individual to give pleasure to the sense. The concept of using herbs for beautification is well defined in Ayurveda. In Ayurveda beauty was defined in holistic terms, and beauty was within everyone's approach. Ayurveda cosmetology started from mother wombs, dinacharya, ratricharya, ritucharya with the practice of herbal & herbo-mineral formulations. Charak Samhita classified cosmetic drugs as Varnya, Kushthaghna, Kandughna, Vayasthapaka, Udardaprashmana, etc. Some medicinal plants like Haridra, Manjistha, Saariva, Chandana, Amalaki, Ghritkumari etc. has been described for beautification of skin, hair, teeth, nails etc. These herbs balances the Agni, the Dosha and the Dhatu to maintain good health. Perfect balance of these three are necessary for good proportion of Dhatu and Updathu which is basic requirement for fit and beautiful skin & body. Moreover, these herbs work in healing of damage tissues of the body. In these herbs Manjistha (*Rubia cordifolia*) holds the reputation of a very good skin care herb as it is used to make the complexion lighter, even and lightendark spots due to its Varnya, Rakta-prasadaka, Rakta-shodhaka (blood purifier), Vishaghna, Rasayana properties. Chemically it contains glucosides known as Manjisthin and Purpurin, along with resins, lime salts and colouring agents etc.

Key Words: Beauty, Manjistha, *Rubia cordifolia*, Varnya, Rakta prasadaka, Rakta shodhaka

INTRODUCTION

Beauty is the quality or aggregate of qualities in a person that gives pleasure to the senses or pleasurable exalts the mind or spirit.^[1] It is perhaps the desire of every human being on earth. It is the natural desire of mankind to have a healthy and glamorous skin with attractive personality. But very few are blessed with naturally perfect skin. People always have great concern about their health and beauty. It is not just a visual experience; but is characteristic that provides a perceptual experience to the eye, the ear, the intellect, the aesthetic faculty, or the moral sense. It is the quality that gives pleasure meaning or satisfaction to the senses.^[2] The concept of using herbs for beautification is well defined in Ayurveda. In Ayurveda beauty was defined in holistic terms, the Ayurvedic definition of beauty conclude – “*Roopam, gunam, vayastyag, iti shubhanga karanam.*” According to Ayurveda, there are three pillars of

beauty. *Roopam* is outer beauty – personified by shining, healthy hair and a clear, radiant complexion. *Gunam* refers to inner beauty – the beauty that shines from within, characterized by a warm, pleasing personality and innocence of mind and heart. And *vayastyag* means lasting beauty – looking, and feeling, younger than your chronological age. Thus, Ayurveda does not focus only on cosmetics to achieve the state of true beauty.^[3] Ayurveda cosmetology starts from mother wombs, dinacharya, ratricharya, ritucharya with the practice of herbal & herbo-mineral formulations. Charak Samhita classified cosmetic drugs as Varnya, Kushthaghna, Kandughna, Vayasthapaka, Udardaprashmana, etc. Some medicinal plants like Haridra, Manjistha, Saariva, Chandana, Amalaki, Ghritkumari etc. has been described for beautification of skin, hair, teeth, nails etc. These

herbs balances the *Agni*, the *Dosha* and the *Dhatu* to maintain good health. Perfect balance of these three are necessary for good proportion of *Dhatu* and *Updhatu* which is basic requirement for fit and beautiful skin & body. In these herbs *Manjistha* (*Rubia cordifolia*) holds the reputation of a very good skin care herb as it is used to make the complexion lighter, even and lighten dark spots^[4] due to its *Varnya*, *Rakta-prasadaka*, *Rakta-shodhaka* (blood purifier), *Vishaghna*, *Rasayana* properties. Chemically it contains glucosides known as Manjisthin and Purpurin, along with resins, lime salts and colouring agents.^[5] Methalonic extract of this herb has been reported to show 14.80% mean inhibition of tyrosinase activity thereby acting as skin whitening agent.^[6] Traditionally, Manjistha is used in many polyherbal formulations for various ailments and cosmetic preparations because it has In Charak Samhita Manjistha is an Ayurvedic herb that is mentioned in the Brihat trayis (Charak Samhita, Sushruta Samhita, Ashtanga Hridaya). Charaka has mentioned it as *varnya*, *jwaraghana* & *vishaghana mahakashaya*.^[11] Sushruta has classified it into - Priyangvadi gana, Ambasthadi gana & as pitta sanshaman, which pacifies pitta dosha.^{[12][13]} Vagbhata also mentioned it with priyangvadi group of herbs. It is well known as *raktshodhak*.^[14] Ayurvedic pharmacopoeia of India therapeutically indicate it for Yoni roga (menstrual disorder), Kustha (skin disease), Sarpavisa (snake bite), Visarpa (herpes virus), Aksi roga (eye disease), Arsa (haemorrhoids), Bhagna (Fracture).^[15]

Properties of Manjistha mentioned in ayurveda –

External Action- Anti-inflammatory (sothahara), wound healing (vranaropana), relieves skin diseases (Kusthaghna).

Digestive System – Manjistha kindles the digestive fire (deepan), aids in digestion (Pachan), retentive (sthambhan), krimighna.

Circulatory system – Blood purifier

Respiratory system – Kaphaghna

inflammatory, antiseptic and galacto-purifier activity.^[7] Root is used externally and internally to gain lustre and glow of the skin and aids to remove pimples, freckles and discoloration.^[8] Traditionally the roots are used to treat various systemic problems and pigmentation anomalies of skin and is an excellent aid in the promotion of complexion. Dried and crushed orange peels, powders of sandal, turmeric and Manjistha makes an excellent face pack. The finely crushed root powder along with little honey applied to face for healing skin tissues damaged by injury or infection. The root powder mixed with ghee, for the medicament of acne.^[9] Vanraji tribes of Kumaun Himalaya use the whole plant pulp rubbed with honey as a cure for acne and dark spots on face.^[10]

MANJISTHA

Reproductive system – Increases uterine contractions and induces menstrual flow, detoxes breast milk (stanya shodhan)

Urinary system – pramehaghana

Skin- skin diseases^[1]

Description of Manjistha -

Botanical Name – *Rubia cordifolia*

Family- Rubiaceae

Chemical composition- Chemically it contains glucosides known as Manjisthin and Purpurin, along with resins, lime salts and colouring agents. Beside all these, it also consist Xanthopurpurin and Pseudopurpurin.^[17]

Properties of Manjistha in API & Bhav Prakash Nighantu-

Rasa – Kasaya, Tikta, Madhur.

Guna – Guru

Virya – Ushna

*Vipaka –Katu**Rakta shodhaka, Pramehaghna, Krimighna, Stambhana, Artavajanana.* [18][19]*Karma – Kaphapittasamaka, Varnya, Rasayana, Visaghna, Sothaghna, Kusthaghna, Vranaropana,***FORMULATION CONTAINING MANJISTHA AS MAIN INGREDIENT USED FOR TREATING SKIN DISEASES –**

S.No.	Formulation	Action
1.	<i>Laghu Manjisthaadi kwatha, Madhya Manjisthaadi kwatha, Brihat Manjisthaadi Kwatha</i>	Treatment of skin diseases [20]
2.	<i>Maha Manjisthaadi kwatha</i>	Treatment of skin diseases [21]
	<i>Manjisthadhya tailam</i>	Useful in pidika [22]
3.	<i>Mukhkrantimkar lepa</i>	Improves Glowness of face [23]
	<i>Haridradavy tailam</i>	Improves Glowness of face [24]
	<i>Kanak tailam</i>	Cure wrinkles [25]
	<i>Manjisthadi tailam</i>	Improves Glowness of face [26]
	<i>Kumkumadi tailam</i>	Glowing face [27]
	<i>Manjistha with honey</i>	increases complexion [28]
4.	<i>Raktachandanadi Lepa</i>	Improves Glowness of face [29]

CONCEPT OF VARNYA AND BEAUTYAS PER AYURVEDA –

In *Ayurveda*, process of formation of skin in foetus is contributed by *vipaka* of *rakta dhatu*. *Agni mahabhuta* is said to be as the root of *varna utpatti*. [30] *Prabha* or maintenance of body complexion is one of the

functions of *pitta* and *bhrajaka pitta* seated in the skins radiates the glow of one's natural complexion that is expressed through *varna*. Hence the herbs which elevate *pitta*, *rakta* in general either acting through their *rasa*, *vipaka* or *prabhava* are considered as *varnya*. [31] Concept of Beauty in

Ayurveda is determined by *prakriti* (Body constitution), *sara* (structural predominance), *sanhanan* (compactness of body), *twak* (skin complexion), *Praman* (Measurement) and *dirghayu lakshyana* (symptom of long life). *Ayurveda* cosmetology starts from mother wombs, *dinacharya*, *ratricharya*, *ritu charya* with the practice of medicinal herbs and minerals. Beautiful woman is always praised in our ancient text as virtue, wealth; affluence and creation depend on women. There was a provision for appointing a beautiful woman (*kalinee*) in the *Rasasala* (pharmacy) for *rasabandha* and the characteristics of *Kalinee* are well described in *Rasaratna samuchachaya* and *Anandakanda*. If the *kalinee* is not available then the

specific way to convert ordinary woman to *kalinee* is also possible by the administration of one *karsa* (3 gm) of purified sulphur along with ghee for twenty one days.^[32] According to *Ayurveda* Human body functions through various channel systems called “*Srotamsi*”, containing both microscopic and macroscopic structures such as the respiratory system, lymphatic/ circulatory system, reproductive system and nervous systems, among others. These channels function as innumerable psycho-biological processes such as enzyme production, neurotransmitter secretion, hormonal intelligence, respiratory capacity and digestive assimilation/ elimination of waste materials and toxins from body, immune power etc. and responsible for wellness and beauty. If these toxins or unprocessed metabolic deposits in body then it can affect the normal psycho-biological cellular intelligence and loss body lustre and beauty. For beautiful skin and body we have to take proper diet and have to follow *dinacharya*, *ratricharya* etc. as mentioned in *Ayurvedic* texts. Water is a major component for keeping skin in good condition. Water originates in the deeper epidermal layers and moves upward to hydrate cells in the stratum corneum in the skin, eventually being lost to evaporation. *Snehana* and *Swedana* bring moisture to our skin. It gives our skin greater elasticity and rejuvenates skin tissues. As cells in our face make their way to the surface over their lifecycle, they die and become saturated with keratin, or skin debris. Keratin is important because it protects skin from the

elements but the shedding of that outer layer can unclog pores. *Snehana* and *Swedan* are believed to be inhibit trans-epidermal water loss, restoring the lipid barrier and restore the amino-lipid of the skin. *Ayurveda* always advocated vegetarian diet in appropriate quantity and advice for plenty of water intakes for restore the beauty and youthfulness.^[33]

RESEARCH REVELATION OF MANJISTHA -

1. Anti-acne property-

Methanol extract of *Rubia cordifolia* inhibit proliferation of *Propionibacterium acne*.^[34] It is moderately effective against TNF alpha and show low activity against IL-8. It is regarded as astringent and useful in external inflammations like ulcers and skin diseases.^[35] The anthraquinone rich fraction of *R. cordifolia* in a gel formulation showed. The anti-acne activity against *Propionibacterium acne*, *Staphylococcus epidermidis*, *Malassezia furfur* when compared with standard *Clindamycin gel*.^[36]

2. Anti-inflammatory activity-

The aqueous extract of *R. cordifolia* showed anti-inflammatory effect in rats.^[37] The anti-inflammatory action is because of the presence of rubimallin. The aqueous extract showed anti-inflammatory activity in rats with carrageenan paw oedema in a dose dependent manner, which is comparable to that of phenylbutazone.^[38] It also inhibited the lipoxygenase enzyme pathway, which catalyses the production of various inflammatory mediators such as leukotrienes that are involved in asthma, arthritis, and other inflammatory disorders and the production of cumene hydroperoxides.^[39] Notable nitric oxide scavenging activity was exhibited in vitro by some extracts of *R. cordifolia*.^[40] A formulation of *munjistin* and *purpurin* from cell culture manifested to have and antiproliferative action during the rapid development of a model oedema.^[41]

3. Anti-microbial activity-

According to Basu et.al the aqueous extract is active against *Bacillus subtilis* and *Staphylococcus aureus*

compared with streptomycin and penicillin G. The ethanolic whole plant extract also showed same result.

Rubiaceae A reported to have considerable antimicrobial activity against Gram +ve bacterial like *Bacillus subtilis*, *Streptococcus faecalis* and *Bacillus cereus*.^[42]

4. Anti-oxidant activity-

5. Neuroprotection-

It has been reported to contain a wide variety of antioxidants and exhibited strong free radical scavenging properties against reactive oxygen and nitrogen species. The alcoholic extract administration reduced the beta amyloid induced cognitive and memory dysfunction in rats. The extract decreases the neuro degeneration and helps in memory retention.^[44]

ACTION OF MANJISTHA –

The blood purifying property of manjistha can be attributed to its ability to calm the pitta dosha. An imbalanced pitta dosha vitiates the blood and impairs its normal functioning. Just like rakta dhatu (blood), the pitta dosha is also responsible for the determination of skin features such as color, texture and temperature.

When pitta dosha aggravate, the excess heat built up inside the body may manifest itself by making skin reddish, irritable and prone to eruptions. Manjistha, with its sweet, bitter and astringent taste, is an effective Pitta pacifier and supports healthy, younger looking, clean and clear skin.

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The study of in vivo antioxidant activity and its influence on ethanol induced immune suppression showed that the concurrent daily administration prevent the decrease of humoral and cell mediated immune response, phagocytosis index, leukocyte count, etc. which were comparable with that of combination of vitamin E & C.^[43]

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Manjistha is known to prove effective in dealing with imbalanced Kapha dosha. Accumulation of kapha dosha can lead to lethargy, sluggishness, sticky bowel movements, foginess and also effects skin as, Kapha stagnation cause lymph stagnation. The bitter, astringent nature of Manjistha helps to balance kapha dosha and considered as a mover of lymph by many Ayurvedic practitioners. According to Ayurveda, the lymph (rasa) and blood (rakta) are the first tissues to become congested when the body is not detoxing properly. The bitter taste of manjistha helps to get rid of the natural impurities from the body resulting in a bright and clear complexion.^[45] It supports proper functioning of the liver and kidneys.^[46]

DISCUSSION-

Manjistha is consist of *Varnya*, *Raktaprasadka*, *Rakta shodhak*, *vishaghna*, *kaphashamaka* etc. properties, as all these properties encounters on *pitta* and *rakta dosha* and remove the pigmentation of skin and helps to attain the normal colour of skin. The *Rakta prasadaka* action of *Manjistha* helps to pacify *Sanchita Doshas* locally. Due to its properties, *Manjistha* is able to remove toxins from body, as these toxins cause inflammation, various skin diseases, skin pigmentation etc. *Manjistha* penetrates into the cellular level of tissues & soaks up all the toxins and neutralize them and makes skin healthy and clear.

Kasaya&Madhura rasa of *Manjistha* subsides the pitta which is the main cause of skin diseases. *Ruksha guna* of *Manjistha* alleviates the *snigdha guna* of pitta, *Guru guna* of *Manjistha* subdues *laghu guna* of vata. The role of *Manjistha* in supporting skin health is evidenced by traditional and reported activities, which show that it act as potent blood purifier, antioxidant, anti-acne, anti-inflammatory, antimicrobial. So it can be evolved as a drug which will be effective in skin healing and maintaining health and pigmentation of skin. Due to its properties and multiple actions *Manjistha* result in a bright and clear complexion and supports healthy skin. So, it conclude that it can be used as a *varnya* cosmoceutical product in combination with other drugs.

CONCLUSION –

The face is the feature which distinguishes a person. It is one of the parameter to identify a person. *Manjistha* is a drug used since ancient times as a colouring agent and promotes pigmentation of skin. It acts as a skin protective herb and heal damaged tissues of skin by virtue of wound healing, antimicrobial, antibacterial, anti-oxidant, anti-acne properties which is revealed by researchers. *Manjistha* for skin ailments can be proved on the basis of available references for *varnya*, *vishaghna*, *krimighna*, and *kusthaghna* action from various literatures. The herbs which encounters pitta, rakta in general by their medicinal properties are considered as *varnya* drugs, as the pitta plays an important role in *prabha* and maintenance of skin colour. The *Manjistha*, due to its properties is a good pitta pacifier and supports healthy, glowing skin. Due to its property of *kaphashamana*, it deal with the imbalanced cough as the *kapha* stagnation leads to sluggishness, fogginess and also cause lymph stagnation which lead to skin problems. *Manjistha* is considered as lymph mover by many as mentioned in various research papers. *Manjistha* due to its properties helps to get rid of the natural impurities from the body resulting in a bright and clear complexion & supports healthy younger looking clean and clear skin.

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