

A BIRD'S EYE VIEW OF TRICHOLOGY IN AYURVEDA

Dr. N. N. L. Bhagavathi*, Dr. C. Rajkumar¹, Dr. P. SrikanthBabu²

*M.D. in Kaya chikitsa, 1- Samhita PG Scholar, 2 – Guide, Associate Professor, PG Dept. of Kayachikitsa, Dr.B.R.K.R. Govt. Ayurvedic College, Hyd.

Article Received on
09 Dec. 2016,

Revised on 29 Dec. 2016,
Accepted on 19 Jan. 2017

DOI: 10.20959/wjpr20172-7806

Corresponding Author*Dr. N. N. L. Bhagavathi**

M.D. in Kaya chikitsa from
Dr.B.R.K.R. Govt.
Ayurvedic College, Hyd.

ABSTRACT

Ayurveda, a life science has always given equal importance to both preventive as well as curative aspects. As a part of it, it has advocated *Dinacharya* (daily regimen) and *Ruthucharya* (seasonal regimen) which comprise a vast description of daily activities starting from waking up during *Bramhi Muhurtha* up to going back to bed. In this vivid description taking care of each part of the body starting from head to toe is clearly explained. Hair is one such aspect among the above about which abundant information is described. For example naming the hair based on the body part where it is present. Likewise a

great emphasis was laid on colour of hair according to *Prakriti*, *Roma kupa sankhya*, *Keshothpathi*, *Kesha poshana*, *Kesha* as a parameter for different kinds of clinical assessments. Apart from this lot of information is available from *Samhithas* regarding hair care, trimming of hair as well as *Romasathana*. Here is an attempt to gather all such information and present it so as to highlight the importance of hair according to the Ayurvedic perspective.

KEYWORDS: Hair, *Prakriti*, *Roma kupa sankhya*, *Keshothpathi*, *Kesha poshana*, *Kesha*, *Romasathana*.

INTRODUCTION

Hair is one such natural ornament which every one of us would flaunt for. *In the contemporary view hair is the common name given to the appendage irrespective of the region where it is present on the body. Whereas Ayurveda Acharyas* were so particular starting from naming the hair according to the part of the body where it is present^[1]. For example:

Table 1: Showing nomenclature of hair basing on the body region.

S.No.	Region Present	Nomenclature
1	On The Scalp	<i>Kesha, Kuntal, Shiroruha, Etc.</i>
2	On The Body	<i>Roma, Loma, Romaraji</i>
3	Eyelashes	<i>Pakshma</i>
4	Mustache, Beard	<i>Smashru</i>
5	Eyebrows	<i>Bhru</i>
6	Genitalia, Armpits	<i>Vyanjana, Vyanjanana</i>

Likewise a great emphasis was laid on colour of hair according to *Prakriti*, *Roma kupa sankhya*, *Keshothpathi*, *Kesha poshana*, *Kesha* as a parameter for different kinds of clinical assessments. Apart from this lot of information is available from *Samhithas* regarding hair care, trimming of hair as well as *Romasathana*.

Etymology of *Kesha*^[2]

The word *Kesha* is derived from the root स्ही with एच् प्रत्यय and कुलक conjugation.

The word के शर सते means that which grows on the head.

Synonyms of *Kesha*^[3]

Synonyms of scalp hair:

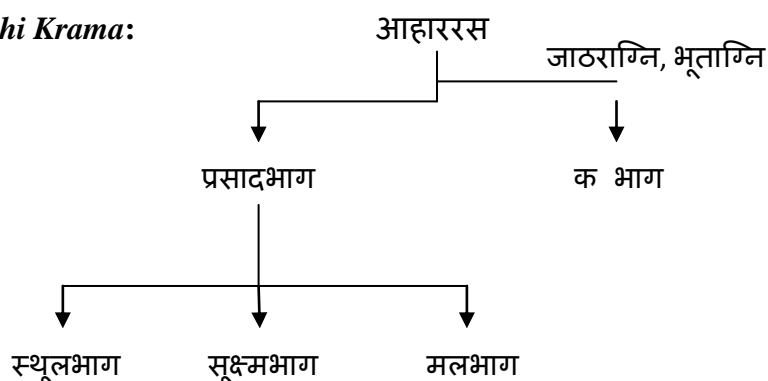
1) <i>Kesha</i>	7) <i>Ashrahs</i>
2) <i>Bala</i>	8) <i>Murdhaja</i>
3) <i>Kacha</i>	9) <i>Shirasija</i>
4) <i>Chikura</i>	10) <i>Shiroruha</i>
5) <i>Kuntala</i>	11) <i>Tirthwak</i>
6) <i>Shiroruha</i>	

Loma^[4]: Body Hair

Etymology: ल+मनिन् प्रत्यय

Definition: लूयतेद्विद्वतेइति।
शरीरस्यक्लेशः

Synonyms: *Tanuruham, Roma, Tanurut*

Loma Uthpathi Krama:

Loma is a *Parthiva Dravya*^[5]; developed and nourished by *Pitruja Bhava*, one among the *Shadbhava*'s responsible for the formation of *Garbha*^[6]. *Kesha* and *Loma* are the *Mala* of *Asthi Dhatu*, which are related with *Sweda-vahasrotas*. The *Asthi Dhatu* has emerged from *Medo Dhatu*. *Ahara Rasa* under the action of *Jataraagni* and *Dhatvagni* gets converted into *Prasadabhaga* and *Kittabhaga*. After *Uttarottara Dhatu Poshana* under the action of *Asthi Dhatvagni* formation of *Asthi Dhatu*, *Poshya Majja Dhatu* and *Kesha lomadi*^[7] *mala* occurs.

Lomadi Mala Vruddhi

Rasa Dhatu provides nutrition to all parts of the body. According to *Ch.S* in process of digestion *Ahara* is transformed into *Ahara Rasa* (nutrition fluid) which further divides into two parts namely –*Sarabhaga* (Essential fluid) and the *Kitta* (Waste matter). The *Kitta Bhaga* is responsible for the production and nutrition of *Mala*'s like *Sweda* (sweat), *Mutra* (urine), *Pitta*, *Kapha*, *Kesha* (hair), *Loma* (body hair), *Nakha* (nails) etc. According to *S.S*, nourishment of *Kesha* is from the end part of *Dhamani*, which are attached to the *Romakupas*^[8].

Lomadi Utpatti Kaala

Keshotpatti Kaala in foetus is considered as 7th month and 6th month of gestation respectively by *Ch.S*^[9] and *A.S*^[10] Before the development of placental circulation *Garbha Poshana* is achieved through *Lomakupa*.^[11]

Sankhya(Count)

Coming to the count of hair *Acharya Charaka* has enumerated total number of human hair to be 29956 and stated that number of *Kesha*, *Smashru*, *Loma* are equal.^[12] *Chakrapani* in his commentary, opined that these are the number of tips of *Dhamani* openings counted in macro

sense and are liable to be increased. *Acharya Sushruta* mentioned them to be innumerable while *Acharya Vagbhata* agrees with *Charaka*.

Kesha in relation to Prakruti

Table 2: Showing colour and quality of hair according to Prakruti.

S.No.	Prakruti	Hair colour	Hair quality
1	<i>Vatala</i> ^[13]	<i>Dhusara</i>	<i>Ati ruksha, Sphutitha, Alpa</i>
2	<i>Pithala</i> ^[14]	<i>Pingala</i>	<i>Valipalita, khalitya</i>
3	<i>Shleshmala</i> ^[15]	<i>Krishna, Alineela/Atineela</i>	<i>Snigdha , Bahu, Ghana, Sthira, Kutila,</i>

Kesha in relation to Medo Sara

Medo Sara Purusha's, possess excessive unctuousness in their complexion they have beautiful hair on the head, face and body.^[16]

Hair relation with Swedavaha Srotas

The *Lomakupa* is the *Swedavaha Srota Mula*. Any pathological condition of *Swedavaha Srotas*, directly or indirectly reflect on hair. *Sweda* is responsible for *Snigdhata* of *Tvacha* and maintenance of *Romakupa*. *Sweda Kshaya* leads to *Romachyuti*. According to modern science sebaceous glands are attached to hair root.

Importance of Hair in the Diagnosis

As a Fatal Sign (Arista Lakshana)

- Matted eyelashes^[17] are indicative of imminent death.
- If pulling of *Kesha*, *Loma* and uprooting *Kesha* doesn't cause pain^[18, 19] it is indicative of imminent death.
- When the hair appears greasy even when no unctuous substance is applied to it^[20] this is also an indicator of imminent death.
- If there is development of new *Seemanthas* and *Avarthakas* in the eyebrows/scalp hair – person survives only for 3 days.^[21]

As a Prognostic Sign:

- *Rakta romata* - *Asadhya lakshana* of *kilasa*.^[22]
- *Lomodgama* - Symptom in *Vishajusta abhyanga*.^[23]
- *Lomaharsha* – Symptom in *Kusta, Akhuvisha, Uchitinga visha, Dushi visha*.

Criteria for Elimination of Treatment

- *Atiloma* and *Aloma* are described as *Nindita* for whom there is no treatment^[24].
- If the hair on the patches of *Switra* are red in colour and patient is suffering from the disease from several years then it is incurable.^[25]

Anticipation of Twin Pregnancy

- Presence of *Romaraji* (hair present on the navel of woman) in downward direction indicates twin pregnancy.^[26]

Criteria for Clinical Assessment in *Vamana*

- *Loma harsha*: Indicates movement of *Dosha* from *Shakha* to *Kosta* after giving *Vamanoushadha*.^[27]

For the Treatment Purpose

- In *Bhela samhita* it is mentioned to give *Churna* of *Kesha*, *Madhu*, *Takramanda* to be given in order to initiate *vamanam*^[28] when *Vamana* doesn't occur within a *Muhurta kala* after giving *Vamanoushadha*.
- *Sushruta* has enlisted *Bala* (*Kesha*) as one among the *Upayantra* (Accessory instruments).^[29]

As a Premonitory Symptom

- Excessive growth of *Kesha*, *Loma* are included among the premonitory signs and symptoms of *Prameha*^[30] and *Sosha*.^[31]
- Climbing of heaps of hair during dream is said to be *Purvarupa* of *Sosha*.^[32]

Hair care

- In *Charaka samhita* it is clearly mentioned that excessive intake of *Kshara* is *Kesha upaghatakar*^[33] (injurious effects on hair) and when the same *Kshara* is used in excess quantity continuously it leads to *Khalitya* (baldness) and *Palitya* (Grey hair).
- Excessive use of *Lavana* (salt) leads to *Akaala khalitya*, *Palitya* and *Valipalita* i.e. premature graying of hair, baldness and wrinkles in the skin respectively.^[34]
- Various kinds of *Tailas* are explained for both improving hair health as well as to combat hair problems like *Darunaka*, *Arumshika*, *Indralupata* etc.,
- Apart from this, *Yogas* for hair dying (both *Krishnikarana* and *Swetikarana*) is mentioned in the *Samhitas*.

Combing

Acharya Sushruta clearly stated that the management of hair (*Kesha Prasadana*) should be done with *Keshaprasadani* (combs and brushes). It is also said that it is *Keshya* and is an aborter of *Raja*, *Mala*, and *Jantu* etc., and increases the beauty of hair. *Sushruta* adds that by regular cutting of hair a person may achieve vigor, happiness, lightness, good look^[35].

Hair trimming, shaving (*Kshurakarma*)

- In *Astanga Sangraha* it is mentioned that trimming of *Smashru* and *Kesha* should be done once in every 15 days.
- In *Vatsayana Kaama Sutra* it is mentioned that shaving of *Smashru* on chin should be done on every 4th/5th/10th day.

Literary review of depilatory formulations

Lomashathana^[36]: *Loma* means *Shareerasya kesha* (body hair).

Shathana means *Vinashana*^[37].

Destruction of body hair is called as *Lomashatana*.

Synonyms: *Tanuruha*, *Roma*, *Tanurut* are considered as synonyms.^[38]

Garuda Purana^[39]

In the *Garuda Purana Udvartana Churnas* are explained, which are also quoted in *Shabda Kalpa Druma* and are as follows:

Harataladi churna, *Harataladi lavana yoga*, *Sudhadi yoga*, *Bhallatakadi yoga*.

Charaka Samhita

In the *Charaka Samhita* while quoting about *phala varga Shami Phala* is considered as *Keshaghna*^[40].

Sushruta Samhita

Sushruta Samhita mentions different methods for *Loma Apaharana*.^[41] They include:

a) Manual method:

... क्षुरकर्तरिसन्दंशैस्तस्यरोमाणिनिर्हेत्॥ (सु सू १ १०४) /

Manual methods of removing like usage of *Kshura*, *Kartari*, *Sandamsha*.

b) By the application of *Lepa*:

Four *Lepas* are enumerated for the purpose in *Dwivraniya Adhyaya*. They are:

Shamibeejadi yoga, *Shankha churnadi yoga*, *Bhallatakadi yoga*, *Agaragodhikadi yoga*.

Sharangadhara Samhita

In this text Acharya Sarangadhara enumerates two formulations for the purpose of *Lomashatana* in the name of *Harataladi yoga* in the *uttara khanda*.^[42]

Chakradatta^[43]

In this text the author enumerates two *romasathana lepa yogas* and four *tailas* that are *Kusumbha Taila*, *Aragvadhadi Taila*, *Karpuraadi Taila*, *Kshara Taila*.

Bhaisajya Ratnavali

In *Bhaisajya Ratnavali* different formulations for *Lomashatana* in the form of *Lepa*^[44] and *Taila*^[45] preparations are enumerated. They are:

Lepa yogas : *Harataladi Lepa*, *Shankhadi Lepa*, *Anjani Lepa*, *Palashaksharadi Lepa*, *Harataladi Lepa*, *Shankhabhasmadi Lepa*, *Bhallatakadi Lepa*
Tailas: *Kusumbha Taila*, *Kshara Taila*, *Aragvadhadya Taila*.

Rajamartanda^[46]

In *Rajamartanda*, *sthirogoadhikara*, there are *Haritaladi lepa yoga*, *Koshataki beeja taila*, *Halahalapucha sadhita sarshapa taila* for *yonilomaharana*.

Haramekhala

Acharya Sri Mahuka, son of Kavi Mandana Acharya Madhava a teacher in medicine wrote this ancient text in *Prakrita Bhasha* (an ancient language which was in use before Sanskrit.). Many cosmetics and beauty aids are been described in the text. Drugs for depilatory purpose were also explained. For *Kesha Shatana* (depilatory) purpose *Pippali* are soaked and dried (*Bhavana*) in the latex of *Nihuna* (*Snuhi*) and powdered. This powder is mixed with equal quantity of *Dhatri Phala* and applied externally as depilatory.^[47]

Kuchumara Tantra

Is an ancient text named *Kuchumara tantra* dealing mainly with the protection and beautification of male and female body parts including genitalia, various temporary and permanent depilatories to remove unwanted hair are also explained.^[48]

Nibandhasangraha

In this text we can find *Yoninirloomikarana adhikara* which comprises of 4 kinds of *haritaladi lepa yogas*, 2 types of *taila* - *Halahalapucha sadhita sarshapa taila*, *Koshamra taila*.^[49]

CONCLUSION

As the time progresses these Ayurvedic trichology concepts are coming into limelight. The value of these yogas related to hair is being increasing in both aesthetic senses as well as in business point of view where their share in world cosmetic market is growing day by day. More research works need be conducted in this jounour. For example, revalidating the efficacy of any *Romasathana yoga* for the purpose of permanent hair removal. Likewise, relationship between the imminent signs of death related particularly hair with the causative pathological phenomenon. Finally, this was an attempt to focus on the concept of kesha according to Ayurveda and bring out the relative perspectives to the maximum extent possible.

REFERENCES

1. Radhakanth Dev, Shabdakalpadruma, Vol 2, Nag Publishers, Delhi, Reprint 1987, Pg 195, pp 926.
2. Radhakanth Dev, Shabdakalpadruma, Vol 2, Nag Publishers, Delhi, Reprint 1987, Pg 195, pp 926.
3. Radhakanth Dev, Shabdakalpadruma, Vol 2, Nag Publishers, Delhi, Reprint 1987, Pg 195, pp 926.
4. Radhakanth Dev, Shabdakalpadruma, Chaturthakhanda, Nag Publishers, Delhi, Reprint 1987, Pg 234, pp 565.
5. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukambha Surabharati Prakashana, Reprint 2000, Sha. 7/16, pg 339, pp 768.
6. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukambha Surabharati Prakashana, Reprint 2000, Sha. 3/7, pg 310, pp 768.
7. Bhavamishra, Bhavaprakasha, Bhishagratna Shri Brahma Shankara Mishra, Volume 1, Chaukambha Sanskrit Sansthan, Varanasi, 8th Ed., 2003, Pu. Kh. 3/181, pg 56, pp 656.
8. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukambha Surabharati Prakashana, Reprint 2000, Su. 28/4, pg 175, pp 768.
9. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukambha Surabharati Prakashana, Reprint 2000, Sha. 4/23, pg 320, pp 768.
10. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukambha Surabharati Prakashana, Reprint 2000, Sha. 6/23, pg 334, pp 768.

11. Vagbhata, Astanga Hridaya, Arunadatta and Hemadri, Bhishagacharya Harishastri Paradakara Vaidya, Chaukhambha Orientalia, Varanasi, 9th Ed, 2005, Su. 22/14, pg 300, pp 956.
12. Radhakanth Dev, Shabdakalpadruma, Vol 2, Nag Publishers, Delhi, Reprint 1987, Pg 195, pp 926.
13. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, vol.II, Reprint 2010, vimana sthana, 8/98, pg 265, 266.
14. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, vol.II, Reprint 2010, vimana sthana, 8/97, pg 264, 265.
15. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, vol.II, Reprint 2010, vimana sthana, 8/96, pg. 263, 264.
16. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukhambha Surabharati Prakashana, Reprint 2000, Vi. 8/106, pg 278, pp 768.
17. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, vol.II, Reprint 2010, Indriya Sthana, 3/6, Pg: 535.
18. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, vol.II, Reprint 2010, Indriya Sthana, 3/6, Pg: 535.
19. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, CHAUKAMBHA SANSKRIT SERIES OFFICE, Vol.II, REPRINT 2010, Indriya Sthana, 8/8, pg. 565.
20. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, CHAUKAMBHA SANSKRIT SERIES OFFICE, Vol.II, REPRINT 2010, Indriya Sthana, 8/9, pg. 565.
21. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, Vol.II, Reprint 2010, Indriya Sthana, 8/6, pgs 564, 565.
22. Agnivesha, Charaka Samhita, Chakrapanidatta, R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, Vol.III, Reprint 2010, Chikitsa sthana, pg. 7/175, pg. 362.
23. Agnivesha, Charaka Samhita, Chakrapanidatta, R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, Vol.III, Reprint 2010, Chikitsa sthana, pg.
24. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukhambha Sanskrit Series Office, Vol.I, Reprint 2010, sutra sthana 21/3, pg .374.

25. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukambha Sanskrit Series Office, Vol.III, Reprint 2010, Chikitsa sthana, 7/175, pg.362.
26. Ayurvediya prasuti tantra evam stri roga, Dr.P.V.Tiwari, Chaukambha orientalia, 2nd edition, reprint 2009, chp 5, signs / symptoms of pregnancy and antenatal care, pg.205
27. Ayurvediya Panchakarma Chikitsa, Acharya mukundilal dvivedi, dr.tarachandra Sharma, Dr.Bhairava mishra, chaukambha sanskrit pratishthan, 5th chapter, pgs.407-409.
28. Bhela samhita, Dr.E.H.Krishnamurthy, Chaukambha Visva Bharati, First Edition, 2000, sidhi sthana, 1/20, pg.520.
29. Susruta Samhita, P.V.Sarma, Chaukumbha Visvabharati, Reprint 2004, sutra sthana, 7/15, pgs.96,97.
30. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukambha Sanskrit Series Office, vol.III, Reprint 2010, Chikitsa Sthana, 6/13, PG.303
31. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukambha Sanskrit Series Office, VOL.III, Reprint 2010, Chikitsa Sthana, 8/35, Pg.371
32. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukambha Sanskrit Series Office, vol.III, Reprint 2010, Chikitsa Sthana, 8/36, pg.371
33. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukambha Sanskrit Series Office, vol.II, Reprint 2010, Vimana Sthana, 1/17, pg.121.
34. Agnivesha, Charaka Samhita, Chakrapanidatta R.K.Sharma, Bhagawan Dash, Chaukambha Sanskrit Series Office, vol.II, Reprint 2010, Vimana Sthana, 1/18, pgs.121,122.
35. Sushruta, Sushruta Samhita, Dalhanacharya, Acharya Yadavji Trikamji and Narayana ram Acharya, Krishnadas Academy, Varanasi, Reprint Ed., 1998, Chikitsa Sthana , 24/73-74, pg 490, pp 824.
36. Radhakanthdev, Shabdakalpadruma, Vol 4, Nag Publishers, Delhi, Reprint 1987, pg 235, pp 565.
37. Radhakanthdev, Shabdakalpadruma, Vol 5, Nag Publishers, Delhi, Reprint 1987, pg 45, pp 555.
38. Radhakanthdev, Shabdakalpadruma, Vol 4, Nag Publishers, Delhi, Reprint 1987, pg 234, pp 565.
39. Radhakanthdev, Shabdakalpadruma, Vol 4, Nag Publishers, Delhi, Reprint 1987, pg 235, pp 565.
40. Agnivesha, Charaka Samhita, Chakrapanidatta, Acharya Yadhavaji Trikamji, Chaukambha Surabharati Prakashana, Reprint 2005, Su. 27/160, pg 161.

41. Sushruta, Sushruta Samhita, Dalhanacharya, Acharya Yadhavji Trikamji and Narayana Ram Acharya, Krishnadasa Academy, Varanasi, Reprint Ed.,1998, Chi. 1/104-108, pg 405, pp 824.
42. Sarangadhara, Sarangadhara samhita, Prof.K.R.Srikanta Murthy, 6th edition, reprint 2006, Uthara khanda, 11/35-39, pg.239.
43. Chakrapanidatta, Chakradatta, P.V.Sarma, Chaukhambha orientalia, 3rd edition, 2002, 62/56-65, Pgs.534,535.
44. Kaviraja Govinda Das Sen , Bhaishajya Ratnavali, Prof. Sidhanandana Mishra, Choukhambha Surbharati Prakashan, Varanasi, Ed., 2005, 60/166-171, pg 949.
45. Kaviraja Govinda Das Sen , Bhaishajya Ratnavali, Prof. Sidhanandana Mishra, Choukhambha Surbharati Prakashan, Varanasi, Ed., 2005, 60/166-171, pg 949-950.
46. Rajamartanda, DR.K.Nishteswar, Dr.R.Vidyanath, Chaukhambha orientalia, first edition 2008, 31/51-53, Pgs.84, 85.
47. Journal of Ayurveda Vol. V 2 Apr-Jun 2011 Beauty aids And Cosmetics in Ancient Indian Literature Pg.77-84, pp 159.
48. Journal of Ayurveda Vol. V 2 Apr-Jun 2011 Beauty aids And Cosmetics in Ancient Indian Literature Pg.77-84, pp 159.
49. Sri vaidya Sodhala, Nibandha Sangraha, Sri Indradev Tripathi, Part3, Kayachikitsa Khanda, Chaukhambha Sanskrit sansthan, 3rd Ed.1999, Pg.512.