

**Review Article****A REVIEW ON REFERENCES OF HERBOMINERAL PREPARATIONS IN *BRUHATRAYEE*****Thakur Vivek^{1*}, Vashisht Kiran², Ansari Farha³**¹Assistant Professor, Department of Rasashastra Evum Bhaishajya Kalpana, Quadra Institute of Ayurveda And Hospital, Near Montfort School, Haridwar Road, Roorkee, Haridwar, Uttarakhand.²Assistant Professor, Department of Dravyaguna, Faculty of Ayurveda, Main Campus, Uttarakhand Ayurveda University, Harrawala, Dehradun, Uttarakhand.³Assistant Professor, Department of Samhita and Siddhanta, Patanjali Bhartiya Ayurvigyan Evam Anusandhan Sansthan, Patanjali Yogpeeth, Delhi-Haridwar National Highway, Near Bahadrad, Haridwar, Uttarakhand.**ABSTRACT**

Ayurveda science has been explained in the form of *Hetu*, *Linga* and *Aushadha*, where *Aushadha* has been given the much importance as success of treatment depends upon the usage of medicine considering the dose, time as well as the forms of medicine. Various sources are available to be used in the form of medicines as Herbs, Metals/Minerals or Animal products. Processed Metals/ Minerals such as Copper, Lead, Mercury were used in Ancient times but as the time goes, there was a drop in the usage of Herbomineral preparations in practice considering the claims put on its safety. *Bruhatrayee* being the most ancient and authentic texts of Ayurveda provides ample of references regarding usage of Herbomineral preparations for treatment of various conditions.

KEYWORDS: Herbomineral preparations, *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, *Samhita Kala*, *Sangraha Kala*, *Rasashastra*.

INTRODUCTION

Ayurveda is a medical science based on *Hetu* (Etiological factors), *Linga* (Symptoms/ Manifestations) and *Aushadha* (Medicine)^[1]. While explaining *Chikitsa Chatuspada*, after Physician, *Aushadha* (medicine) is given the second importance^[2] that explains about numerous formulations to treat the various medical conditions. Ayurvedic formulations consists substances of Herbal, Mineral/Metal and Animal origin which are pharmaceutically processed to have the therapeutic effects. Ayurvedic compound formulations can be broadly classified into two groups viz. *Rasaushadhis* (Herbo-Mineral-Metallic preparations) and *Kashthaushadhis* (Herbal preparations). The various processes as *Shodhana*, *Marana*, *Bhavana* of *Rasashastra* reconcile these toxic matter to an effective remedies that are known as Herbomineral preparations^[3].

Rasashastra is a branch of Ayurveda, dealing with Metallic, Mineral and poisonous drugs which are pharmaceutically processed and made fit for internal administration. This branch is not included among the eight branches of Ayurveda indicating the fact that in its initial days it was developed as an independent pharmaceutical science, in due course it became a considerable part of Ayurveda and played a

major role in development of Ayurveda science, so that it has become the inseparable component of therapeutic process^[4]. Through the history it is evident that *Rasashastra* as an independent branch was established from 8th century AD onwards i.e., in *Sangraha Kala* (600AD to 1500AD). Though, *Sangraha Kala* is more pronounced for the therapeutic utility of Metals and Minerals a good narration can also be observed in classical texts like *Charaka Samhita*, *Sushruta Samhita* and *Ashtanga Hridaya* which belongs to the era much earlier to 8th AD i.e., *Samhita Kala* (1500BC to 600 AD)^[5]. *Acharya Chakrapani* (11th century AD) the renowned commentator of *Charaka Samhita* and *Sushruta Samhita* also included in his work many Metallic and Mineral preparations for treatment of various conditions. References of the use of Mercury, Sulphur and other Minerals for the treatment were minimal from *Dridhbala* to *Chakradutta* and *Vrinda*, though Minerals and Gems were used, they were used in powdered form^[6]. Thereafter, the Metallic and Herbomineral preparations taken an incredible space in Ayurvedic treatment and today often practiced in different parts of India.

However, it is very well mentioned in almost all the classical texts of *Rasashastra* that, Mineral

preparations are more advantageous as compared to Herbal preparations. But, the past decade has witnessed concerns regarding the safety of Metallic preparations by the western medical circles and this has damaged the reputation of age old Ayurvedic heritage and restrictions over the usage of Mineral preparations^[7]. But keeping in mind the benefits of using Minerals in the preparations such as increased therapeutic effects with small doses, producing

instant effects and the increased efficacy of medicines with time^[8], the Herbomineral preparations are widely accepted and are being utilized more often.

The present paper is a simple compilation focusing on the Herbomineral preparations mentioned in *Bruhatrayee*. This review is expected to give an insight to assume the frequency of usage of Metals and Minerals during the period of *Samhita Kala*.

References of herbomineral preparations in *Bruhatrayee*

Table 1: References of Herbomineral Preparations in *Charaka Samhita*^[9]

S. No.	References	Preparations	Minerals used	Therapeutic uses
1.	<i>Ch.chi.1(1)/ 58</i>	<i>Dvitiya Brahmarasayana</i>	<i>Swarna, Rajat Tamra Churna, Lauha Bhasma</i>	<i>Rasayana</i>
2.	<i>Ch.chi.1(3)/ 15-23</i>	<i>Lauhadi Rasayana</i>	<i>Lauha Bhasma</i>	<i>Rasayana</i>
3.	<i>Ch.chi.1(3)/46-47</i>	<i>Triphala Rasayana</i>	<i>Sarva lauha, Swarna Bhasma</i>	<i>Rasayana</i>
4.	<i>Ch.chi.1(3)/48-50</i>	<i>Shilajatu Rasayana</i>	<i>Shilajatu</i>	<i>Rasayana</i>
5.	<i>Ch.chi. 1(4)/13-26</i>	<i>Indrokta Rasayana</i>	<i>Swarna, Tamra, Praval, Shankha Bhasma</i>	<i>Rasayana</i>
6.	<i>Ch.chi.5/97</i>	<i>Shilajatu Prayoga</i>	<i>Shilajatu</i>	<i>Gulma</i>
7.	<i>Ch.chi.7/70-72</i>	<i>Lelitaka Prayoga</i>	<i>Gandhaka, Pashana bheda, Swarnamakshika</i>	<i>Kushtha</i>
8.	<i>Ch.chi.7/73-75</i>	<i>Madhvasava</i>	<i>Ayas (Lauha) Churna</i>	<i>Kushtha, Kilasa</i>
09.	<i>Ch.chi.7/84-88</i>	<i>Trapvadi Lepa</i>	<i>Lauha, Seesam, Trapu Churna</i>	<i>Mandala Kushtha</i>
10.	<i>Ch.chi.7/102-109</i>	<i>Kushthadi Taila</i>	<i>Tutha, Kaseesa</i>	<i>Kushtha</i>
11.	<i>Ch.chi.7/111-116</i>	<i>Kanakaksheeri Tailam</i>	<i>Manahshila, Haritala, Tutha</i>	<i>Mandala Kushtha</i>
12.	<i>Ch.chi. 7/117-118</i>	<i>Sidhma Lepa</i>	<i>Manahshila, Kaseesa</i>	<i>Sidhma Kushtha, Kilasa, Shwitra</i>
13.	<i>Ch.chi.7/120-121</i>	<i>Vipadikahar Ghrita/ Taila</i>	<i>Tutha</i>	<i>Vipadika, Charma Kushtha, Ekakushtha, Kitibha, Alasaka</i>
14.	<i>Ch.chi.7/167-171</i>	<i>Manahshiladi Lepa</i>	<i>Manah shila, Kaseesa</i>	<i>Shwitra</i>
15.	<i>Ch.chi.12/39-40</i>	<i>Triphaladya Arishta</i>	<i>Lauha Rajah</i>	<i>Hrudaya Roga, Pandu, Arsha, Shotha</i>
16.	<i>Ch.chi.12/41-42</i>	<i>Krushnadi Churna</i>	<i>Ayo Rajah (Lauha)</i>	<i>Tridoshaja Shotha</i>
17.	<i>Ch.chi.12/43-46</i>	<i>Ksharagudika</i>	<i>Ayo Rajah (Lauha)</i>	<i>Pleeha Roga, Shotha, Ashmari, Gulma</i>
18.	<i>Ch.chi.12/49</i>	<i>Shilajatu Prayoga</i>	<i>Shilajatu</i>	<i>Tridosha Shvayathu</i>
19.	<i>Ch.chi.13/73</i>	<i>Paanartha</i>	<i>Ayaskriti</i>	<i>Kaphaja Udara Roga</i>
20.	<i>Ch.chi.13/152-153</i>	<i>Shilajatu Prayoga</i>	<i>Shilajtu</i>	<i>Udara Roga</i>
21.	<i>Ch.chi.15/188</i>	<i>Panchamakshara</i>	<i>Ayo Rajah (Lauha)</i>	<i>Agni Deepaka, Pleeha Roga, Prameha, Anaha, Sarva Visha</i>
22.	<i>Ch.chi.16/69</i>	<i>Lauha Churna</i>	<i>Ayo rajah (Lauha)</i>	<i>Pandu</i>
23.	<i>Ch.chi. 16/70-71</i>	<i>Navayasa Churna</i>	<i>Ayo rajah (Lauha)</i>	<i>Pandu, Kushtha, Arsha, Kamala</i>
24.	<i>Ch.chi.16/ 72-77</i>	<i>Mandura Vataka</i>	<i>Mandura, Makshika</i>	<i>Pandu</i>

25.	<i>Ch.chi.16/78</i>	Swarnamakshikadi Yoga	Swarnamakshika, Shilajatu, Lauha Bhasma	Pandu
26.	<i>Ch.chi. 16/81-86</i>	Yogaraja	Shilajatu, Swarnamakshika, Lauha Bhasma	Pandu, Rasayana, Vishajanya Upadrava, Kasa, Vishama Jwara
27.	<i>Ch.chi.16/87-92</i>	Shilajatu Vataka	Shilajatu	Pandu, Kushtha, Jwara, Shukra Vikriti
28.	<i>Ch.chi.16/93-96</i>	Punarnava Mandura	Mandura	Pandu, Pleeha Roga, Arsha, Kushtha, Krumi
29.	<i>Ch.chi.16/97-99</i>	Darvyadi lehya	Ayo Rajah (Lauha)	Kamala, Pandu
30.	<i>Ch.chi.16/102-104</i>	Mandura Vataka	Mandura	Pandu, Arsha, Grahani
31.	<i>Ch.chi. 16/105</i>	Gaudarishta	Ayo Rajah (Lauha)	Pandu
32.	<i>Ch.chi.16/117-122</i>	Vyoshadya Ghrita	Ayo Rajah (Lauha)	Pandu
33.	<i>Ch.chi.17/77-78</i>	Dhumapana	Manahshila, Haritala	Hikka Shwasa
34.	<i>Ch.chi.17/125-128</i>	Muktadya Churna	Mukta, Pravala, Tamra, Lauha	Hikka Shwasa
35.	<i>Ch.chi.17/129</i>	Shatyadi Yoga	Kalalauhajam	Hikka Shwasa
36.	<i>Ch.chi.17/145-146</i>	Manahshiladi Ghrita	Manahshila	Hikka Shwasa
37.	<i>Ch.chi.18/52</i>	Vidangadi Leha	Manahshila	Kasa, Shwasa, Hikka
38.	<i>Ch.chi.18/69</i>	Manahshiladi Dhuma	Manahshila, Haritala	Vataja Kasa, Sannipataja Kasa
39.	<i>Ch.chi.18/71</i>	Prapaundrikadi Dhuma	Manahshila	Kasa
40.	<i>Ch.chi.18/73-75</i>	Dhumavarti	Manahshila, Haritala	Kasa
41.	<i>Ch.chi.18/146</i>	Manahshiladi Dhuma	Manahshila	Kshataja Kasa
42.	<i>Ch.chi.18/168-169</i>	Haritaki Leha	Manahshila	Shwasa Kasa
43.	<i>Ch.chi.18/177</i>	Jeevantyadi Leha	Lauha Rajah	Pancha Kasa
44.	<i>Ch.chi.19/82</i>	Raktastambhana Yoga	Shankha	Raktatisara
45.	<i>Ch.chi.20/32-33</i>	Peya Yoga	Swarna Gairika	Pittaja Chardi
46.	<i>ch.chi.21/81-82</i>	Pradeha Yoga	Mukta, Shankha, Pravala, Gairika	Visarpa
47.	<i>Ch.chi.21/130-131</i>	Peedana Karma	Makshika, Ayah, Swarna, Tamra	Granthi Visarpa
48.	<i>Ch.chi.23/46</i>	Hridayavarana Chikitsa - Pana	Gairika	Vishaghna
49.	<i>Ch.chi.23/54-60</i>	Mrutasanjeevana Agada	Haritala, Manahshila	Sarvavishaghna
50.	<i>Ch.chi.23/77-94</i>	Mahagandhahasti Agada	Haritala, Manahshila, Gairika	Visha
51.	<i>Ch.chi.23/101-104</i>	Kshara Agada	Gairika	Visha
52.	<i>Ch.chi.23/190-192</i>	Mamsadi Yoga	Manahshila	Shotha and Visha Vikara
53.	<i>Ch.chi.23/212-218</i>	Vachadi Yoga	Shilajatu, Manahshila	Visha
54.	<i>Ch.chi.23/220</i>	Lepa Yoga	Gairika	Nakha dant kshat Visha
55.	<i>Ch.chi.23/223</i>	Churna Yoga	Shudha Gandhaka	Shanka Visha
56.	<i>Ch.chi.23/239</i>	Vamana Yoga	Tamra Rajah	Gara Visha
57.	<i>Ch.chi.23/252-253</i>	Dharanartha	Vajra, Vaidurya	Sarpa Visha

58.	Ch.chi.25/67	Ava Churnan Yoga	Shukti Bhasma	Vrana Ropana
59.	Ch.chi.25/100	Avsavana Karma	Ashma Kaseesa	Vrana
60.	Ch.chi.25/114	Twakshuddhikara Pralepa	Manahshila	Vrana
61.	Ch.chi.25/115	Twak Krushnakara Lepa	Ayorajah, Kaseesa	Vrana
62.	Ch.chi.25/117	Savarnikarana Lepa	Gairika, Kaseesa	Vrana
63.	Ch.chi.26/56	Churna Yoga	Pravala Churna	Kaphaja Mutrakruhha
64.	Ch.chi.26/63	Punarnavadi Yoga	Ayo Rajah (Lauha)	Ashmari, Sharkara
65.	Ch.chi.26/99	Rasayana Yoga	Shilajatu	Kaphaja Hrudroga
66.	Ch.chi.26/152	Manahshiladi Nasya	Manahshila	Kaphaja Pratishtaya
67.	Ch.chi.26/196	Peetaka Churna	Manahshila, Haritala	Kantha Roga, Mukha Roga
68.	Ch.chi.26/206-214	Khadiradi Gutika	Gairika	Danta, Gala, Mukha Roga
69.	Ch.chi.26/232	Lepa Yoga	Gairika	Vataja Netra Roga
70.	Ch.chi.26/235	Rasakriya Lepa	Manahshila, Gairika	Kaphaja Netra Roga
71.	Ch.chi.26/241	Sumanah korakadi Varti	Shankha Bhasma	Raktaja and Pittaja Netra Roga
72.	Ch.chi.26/242	Saindhavadi Varti	Shankha Nabhi	Kaphaja Netra Roga
73.	Ch.chi.26/246	Shankhadi Varti Pravaladi Varti	Lauha Bhasma, Tamra Bhasma, Pravala, Shankha	Sarva Akshi Roga
74.	Ch.chi.26/250-251	Sauveeradi Churna Anjana	Shudha Tutha, Manahshila, Bhasma, Lauha	Timira
75.	Ch.chi.26/252-253	Sukhavati Varti	Shankha Bhasma, Manahshila	Timira
76.	Ch.chi.26/254-255	Drishtiprada Varti	Ayo Rajah, Kaseesa	Andhya Roga
77.	Ch.chi.26/268-275	Mahaneela Tailam	Kaseesa, Krushna Lauha	Chakshushya, Ayushya, Shirah Sarva Roga
78.	Ch.chi.26/280-282	Palitanashaka Yoga	Ayas Churna	Palitya
79.	Ch.chi.29/159	Vataraktanashak Dravya	Shudha Shilajatu	Vatarakta
80.	Ch.chi.30/78-81	Dhatakyadi Taila	Kaseesa	Picchila, Vipluta, Unnata Yonivyapat
81.	Ch.chi.30/84	Pippalyadi Churna	Ayo Rajah (Lauha)	Yonisrava
82.	Ch.chi.30/90-95	Pushyanuga Churna	Gairika	Yonidosha, Rajodosha
83.	Ch.chi.30/121	Yoga	Kaseesa	Picchila Yoniroga
84.	Ch.chi.30/150	Rasayana Yoga	Lauha Rasayana	Kaphaja Shukra Dushti
85.	Ch.si.8/36	Atisaranashaka Ghrita	Shankha Churna	Atisara

Ch.-Charaka Samhita, Chi.- Chikitsasthana, Si.-Siddhithana

Table 2: References of Herbomineral Preparations in Sushruta samhita^[10]

S.NO.	Reference	Preparations	Mineral used	Indication
1.	Su.Chi.1/60	Rasakriya	Kaseesa, Manahshila, Haritala	Vrana Shodhana
2.	Su.chi.1/96	Pralepa	Kaseesa	Vrana Pandu Karma
3.	Su.chi.1/97-98	Lepa	Kaseesa, Haritala, Manahshila	Vrana Pandu Karma
4.	Su.chi.1/99-100	Gutika	Muktashukti, Mani Churna	Vrana Pratisarana
5.	Su.chi.1/103	Lepa	Kaseesa	Romasanjanana

6.	<i>Su.chi.1/107</i>	<i>Lepa</i>	<i>Haritala</i>	<i>Lomapaharana</i>
7.	<i>Su.chi.1/108</i>	<i>Lepa</i>	<i>Haritala</i>	<i>Romanashaka</i>
8.	<i>Su.chi.2/68</i>	<i>Ropana Taila</i>	<i>Manahshila, Tutha</i>	<i>Vrana Ropana</i>
9.	<i>Su.chi.2/73</i>	<i>Taila Yoga</i>	<i>Tutha</i>	<i>Vrana Ropana</i>
10.	<i>Su.chi.2/82</i>	<i>Taila Yoga</i>	<i>Tutha</i>	<i>Vrana Ropana</i>
11.	<i>Su.chi.2/89-91</i>	<i>Shodhana Taila/Ghrita/Kalka</i>	<i>Kaseesa, Tutha, Haritala</i>	<i>Vrana Shodhana</i>
12.	<i>Su.chi.5/35</i>	<i>Pathya Yoga</i>	<i>Shilajatu</i>	<i>Urustambha</i>
13.	<i>Su.chi.6/12</i>	<i>Taila Yoga</i>	<i>Kaseesa, Haritala</i>	<i>Arsha</i>
14.	<i>Su.chi.6/21</i>	<i>Yoga</i>	<i>Ayaskriti</i>	<i>Arsha</i>
15.	<i>Su.chi.7/11</i>	<i>Ghrita</i>	<i>Shilajatu</i>	<i>Pittaja Ashmari</i>
16.	<i>Su.chi.8/39</i>	<i>Shodhana Varga</i>	<i>Kaseesa</i>	<i>Bhagandara</i>
17.	<i>Su.chi.8/42</i>	<i>Vrana Shodhana</i>	<i>Tutha</i>	<i>Bhagandara Vrana Shodhana</i>
18.	<i>Su.chi.9/6</i>	<i>Yoga</i>	<i>Shilajatu, Swarnamakshika, Ayaskriti</i>	<i>Medagata Kusththa Chikitsa</i>
19.	<i>Su.chi.9/10</i>	<i>Lepa</i>	<i>Tutha, Kaseesa, Manahshila, Haritala</i>	<i>Kushtha</i>
20.	<i>Su.chi.9/25</i>	<i>Lepa</i>	<i>Lauha Churna</i>	<i>Shwitra</i>
21.	<i>Su.chi.9/27</i>	<i>Lepa</i>	<i>Ththa, Haritala</i>	<i>Shwitra</i>
22.	<i>Su.chi.9/30</i>	<i>Ghrita</i>	<i>Lauha Churna</i>	<i>Kushtha</i>
23.	<i>Su.chi.9/54-56</i>	<i>Vajraka Taila</i>	<i>Kaseesa, Manahshila</i>	<i>Kushtha, Nadi vrana</i>
24.	<i>Su.chi.9/57-63</i>	<i>Mahavajraka Taila</i>	<i>Tutha, Sindoor</i>	<i>Kushtha, Nadi vrana</i>
25.	<i>Su.chi.10/6</i>	<i>Arishta</i>	<i>Ayo Rajah (Lauha)</i>	<i>Kushtha, Meha, Pandu</i>
26.	<i>Su.chi.10/11-12</i>	<i>Lauha Rasayana</i>	<i>Ayaskriti</i>	<i>Kushtha</i>
27.	<i>Su.chi.11/10</i>	<i>Rasayana</i>	<i>Ayaskriti</i>	<i>Prameha</i>
28.	<i>Su.chi.12/10</i>	<i>Shalasaradi Leha</i>	<i>Krushnayas, Tamra churna</i>	<i>Prameha</i>
29.	<i>Su.chi.12/11</i>	<i>Navayasa Lauha</i>	<i>Krushnaayas Churna</i>	<i>Prameha, Kushtha, Pandu</i>
30.	<i>Su.chi.12/12-19</i>	<i>Lauharishta</i>	<i>Lauha Patra</i>	<i>Prameha, Kushtha, Pandu</i>
31.	<i>Su.chi.13/10-11</i>	<i>Shilajatu Prayoga</i>	<i>Shilajatu</i>	<i>Madhumeha</i>
32.	<i>Su.chi.13/17-18</i>	<i>Yoga</i>	<i>Swarnamakshika, Rajatamakshika</i>	<i>Meha, Kushtha, Pandu, Kshaya</i>
33.	<i>Su.chi.16/32</i>	<i>Kwatha Yoga</i>	<i>Shilajatu</i>	<i>Vidradhi</i>
34.	<i>Su.chi.17/6-7</i>	<i>Lepa Yoga</i>	<i>Mukta, Mani, Gairika</i>	<i>Pittaja Visarpa</i>
35.	<i>Su.chi.17/10-13</i>	<i>Gauryadi Ghrita</i>	<i>Gairika</i>	<i>Pittaja Visarpa, Nadi vrana</i>
36.	<i>Su.chi.18/18-19</i>	<i>Taila Paka</i>	<i>Haritala</i>	<i>Granthi, Apachi, Arbuda</i>
37.	<i>Su.chi.18/41</i>	<i>Lepa Yoga</i>	<i>Manahshila, Haritala</i>	<i>Medo Arbuda</i>
38.	<i>Su.chi.18/54</i>	<i>Churna Yoga</i>	<i>Kaseesa, Tutha</i>	<i>Medaja Galaganda</i>
39.	<i>Su.chi.19/17</i>	<i>Taila Yoga</i>	<i>Kaseesa, Manahshila, Haritala</i>	<i>Medaja Vriddhi</i>
40.	<i>Su.chi.19/30</i>	<i>Lepa Yoga</i>	<i>Gairika</i>	<i>Pittaja Upadansha</i>
41.	<i>Su.chi.19/40</i>	<i>Churna Yoga</i>	<i>Gairika, Tutha, Kaseesa</i>	<i>Upadansha Vrana</i>
42.	<i>Su.chi.19/45-48</i>	<i>Churna Yoga</i>	<i>Tutha, Kaseesa, Manahshila</i>	<i>Upadansha Vrana, Visarpa</i>
43.	<i>Su.chi.20/6</i>	<i>Lepa Yoga</i>	<i>Manahshila, Haritala</i>	<i>Andhalaji, Yavaprakhya, Panasika, Kachhapika, Pasahanagardhabha</i>
44.	<i>Su.chi.20/21-22</i>	<i>Lepa Yoga</i>	<i>Kaseesa, Haritala</i>	<i>Alasa</i>
45.	<i>Su.chi.20/24</i>	<i>Lepa Yoga</i>	<i>Manahshila, Kaseesa, Tutha</i>	<i>Indralupta</i>
46.	<i>Su.chi.20/28</i>	<i>Lepa Yoga</i>	<i>Haritala</i>	<i>Arunshika</i>

47.	<i>Su.chi.20/59</i>	<i>Lepa Yoga</i>	<i>Kaseesa, Tutha, Haritala</i>	<i>Ahiputana</i>
48.	<i>Su.chi.23/12</i>	<i>Kwatha Yoga</i>	<i>Lauha Bhasma</i>	<i>Shopha</i>
49.	<i>Su.chi.25/28-31</i>	<i>Neelee Taila</i>	<i>Krushna ayorajah (Lauha)</i>	<i>Palita</i>
50.	<i>Su.chi.25/32-37</i>	<i>Sairiyakadi Taila</i>	<i>Kaseesa, Lauha Churna</i>	<i>Palita, Khalita</i>
51.	<i>Su.chi.25/38</i>	<i>Mardana Ghrita</i>	<i>Manahshila, Haritala</i>	<i>Vyanga, Neelika, Vipadika</i>
52.	<i>Su.chi.28/14-22</i>	<i>Rasayana Yoga</i>	<i>Swarna Bhasma</i>	<i>Alakshmighna, Medha vridhhi, Saubhagyakara</i>
53.	<i>Su.ka.2/50-52</i>	<i>Dooshivishari Agada</i>	<i>Swarnagairika</i>	<i>Dooshi Visha</i>
54.	<i>Su.ka.3/13-14</i>	<i>Lepa Yoga</i>	<i>Rajat, Parada, Swarna</i>	<i>Vishaghna</i>
55.	<i>Su.ka.5/65-67</i>	<i>Tarkshya Agada</i>	<i>Swarnagairika</i>	<i>Takshaka Sarpavisha</i>
56.	<i>Su.ka.5/76-77</i>	<i>Agada</i>	<i>Gairika</i>	<i>Mandala Visha</i>
57.	<i>Su.ka.6/3</i>	<i>Kshara Agada</i>	<i>Haritala, Lauha, Tamra</i>	<i>Sarva Visha</i>
58.	<i>Su.ka.6/14-27</i>	<i>Mahasugandhi Agada</i>	<i>Gairika, Manahshila</i>	<i>Sarpa Visha</i>
59.	<i>Su.ka.8/111-112</i>	<i>Leha Yoga</i>	<i>Manahshila, Haritala</i>	<i>Mutravisha Dansha</i>
60.	<i>Su.ut.9/15-16</i>	<i>Gutikanjana</i>	<i>Swarnagairika</i>	<i>Abhishyanda</i>
61.	<i>Su.ut.10/8</i>	<i>Anjana</i>	<i>Gairika, Shankha</i>	<i>Pittaja Abhishyanda</i>
62.	<i>Su.ut.10/15</i>	<i>Vaiduryadya Anjana</i>	<i>Vaidurya Mani, Shankha, Rajat Bhasma</i>	<i>Shukti Roga</i>
63.	<i>Su.ut.11/7-10</i>	<i>Anjana Varti</i>	<i>Tamra, Tutha, Manahshila, Haritala</i>	<i>Kaphaja Netra Roga</i>
64.	<i>Su.ut.11/16</i>	<i>Yoganjana</i>	<i>Kaseesa</i>	<i>Praklinna Vartma Roga</i>
65.	<i>Su.ut.11/17</i>	<i>Anjana</i>	<i>Manahshila</i>	<i>Netra Kandu</i>
66.	<i>Su.ut.12/13-14</i>	<i>Varti Yoga</i>	<i>Shilajatu, Lauha bhasma, Tamra bhasma</i>	<i>Rakta Abhishyanda</i>
67.	<i>Su.ut.12/15</i>	<i>Anjana Yoga</i>	<i>Kaseesa</i>	<i>Sirotpata Roga</i>
68.	<i>Su.ut.12/16</i>	<i>Anjana Yoga</i>	<i>Manahshila, Tutha</i>	<i>Sirotpata Roga</i>
69.	<i>Su.ut.12/24-27</i>	<i>Lekhyanjana</i>	<i>Swarna, Rajat, Tamra Bhasma</i>	<i>Arjuna Roga</i>
70.	<i>Su.ut.12/41</i>	<i>Anjana Yoga</i>	<i>Kansyamala, Swarna gairika, Tamra Bhasma</i>	<i>Netrapaka</i>
71.	<i>Su.ut.12/46</i>	<i>Rasakriyanjana</i>	<i>Kaseesa, Tamra, Lauha</i>	<i>Puyalasa</i>
72.	<i>Su.ut.12/51</i>	<i>Anjana Yoga</i>	<i>Tamra Churna</i>	<i>Praklinna Vartma Roga</i>
73.	<i>Su.ut.12/52</i>	<i>Anjana Yoga</i>	<i>Shankha Bhasma, Neela Tutha</i>	<i>Aklinnavartma, Praklinna Vartma Roga</i>
74.	<i>Su.ut.13/8</i>	<i>Pratisarana Yoga</i>	<i>Manahshila, Kaseesa</i>	<i>Lekhya Roga</i>
75.	<i>Su.ut.14/3-4</i>	<i>Avachurnana</i>	<i>Kaseesa, Manahshila</i>	<i>Bisagranthi Roga</i>
76.	<i>Su.ut.14/5</i>	<i>Pratisarana Yoga</i>	<i>Neela Tutha</i>	<i>Lagana</i>
77.	<i>Su.ut.14/6-7</i>	<i>Pratisarana Yoga</i>	<i>Manahshila</i>	<i>Anjanamika</i>
78.	<i>Su.ut.14/8</i>	<i>Varti Yoga</i>	<i>Neela Tutha, Kaseesa</i>	<i>Krumigranthe Roga</i>
79.	<i>Su.ut.15/25-28</i>	<i>Shankhadya Anjana</i>	<i>Shankha, Pravala, Lauha Bhasma</i>	<i>Armapidika, Sirajala</i>
80.	<i>Su.ut.17/6-7</i>	<i>Anjana Yoga</i>	<i>Gairika, Manahshila</i>	<i>Pittavidagdha Drushti, Shleshmavidagdha Drushti</i>
81.	<i>Su.ut.17/12</i>	<i>Rasanjanadya Anjana</i>	<i>Swarnagairika</i>	<i>Pittavidagdha Drushti</i>
82.	<i>Su.ut.17/18</i>	<i>Manahshiladya Anjana</i>	<i>Manahshila</i>	<i>Ratryandhya</i>

83.	<i>Su.ut.17/27</i>	<i>Gutikanjana</i>	<i>Manahshila</i>	<i>Divandhya</i>
84.	<i>Su.ut.17/39</i>	<i>Rasakriya</i>	<i>Manahshila</i>	<i>Pittaja Timira</i>
85.	<i>Su.ut.17/43</i>	<i>Rasakriya</i>	<i>Manahshila, Kaseesa</i>	<i>Kaphaja Timira</i>
86.	<i>Su.ut.17/44</i>	<i>Anjana Yoga</i>	<i>Kaseesa</i>	<i>Timira</i>
87.	<i>Su.ut.17/87</i>	<i>Lepa Yoga</i>	<i>Swarnagairika</i>	<i>Netragata Vedana, Raga</i>
88.	<i>Su.ut.17/96-97</i>	<i>Anjana Yoga</i>	<i>Muktapishti, Vaidurya</i>	<i>Drushti Prasadana</i>
89.	<i>Su.ut.17/98-99</i>	<i>Anjana Yoga</i>	<i>Manahshila</i>	<i>Drushti Sthairya</i>
90.	<i>Su.ut.18/24-25</i>	<i>Lekhana Putapaka</i>	<i>Krushnalauha Bhasma, Tamra bhasma</i>	<i>Lekhana Karma</i>
91.	<i>Su.ut.18/85-93</i>	<i>Churnanjanana</i>	<i>Swarna, Rajat, Mukta, Pravala</i>	<i>Sarva Netra Roga</i>
92.	<i>Su.ut.18/94-97</i>	<i>Bhadrodaya Anjana</i>	<i>Sapta Ratna</i>	<i>Sarva Netra Roga</i>
93.	<i>Su.ut.18/98-99</i>	<i>Tagaradyanjanana</i>	<i>Manahshila</i>	<i>Sarva Netra Roga</i>
94.	<i>Su.ut.18/100-102</i>	<i>Manahshiladya Anjana</i>	<i>Manahshila, Swarnamakshika, Lauha Bhasma</i>	<i>Timira, Shukla Arma, Netra kandu</i>
95.	<i>Su.ut.19/14</i>	<i>Kukunakahara Anjana</i>	<i>Manahshila, Krushna Lauha</i>	<i>Kukunaka</i>
96.	<i>Su.ut.19/15</i>	<i>Gutikanjana</i>	<i>Tamra Bhasma</i>	<i>Kukunaka</i>
97.	<i>Su.ut.21/48</i>	<i>Priyangvadi Taila</i>	<i>Manahshila</i>	<i>Karna Srava</i>
98.	<i>Su.ut.21/52</i>	<i>Churna Yoga</i>	<i>Haritala</i>	<i>Karna Krumi</i>
99.	<i>Su.ut.30/5</i>	<i>Pradeha</i>	<i>Gairika</i>	<i>Shakuni Graha</i>
100.	<i>Su.ut.31/6</i>	<i>Pradeha</i>	<i>Shankha Churna</i>	<i>Revati Graha</i>
101.	<i>Su.ut.32/4</i>	<i>Taila Abhyanga</i>	<i>Haritala, Manahshila</i>	<i>Putana Graha</i>
102.	<i>Su.ut.35/8</i>	<i>Bali karma</i>	<i>Parada, Manahshila</i>	<i>Mukha Mandika</i>
103.	<i>Su.ut.39/235-239</i>	<i>Mahakalyanaka Ghrita</i>	<i>Swarna, Mani</i>	<i>Sarvarogahara, Palita, Khalita</i>
104.	<i>Su.ut.39/311-312</i>	<i>Niruha Basti</i>	<i>Gairika</i>	<i>Pittaja Jwara</i>
105.	<i>Su.ut.44/19</i>	<i>Ayorajovyoshadya Avaleha</i>	<i>Ayo Rajah (Lauha)</i>	<i>Pandu</i>
106.	<i>Su.ut.44/24</i>	<i>Triphaladi Churna</i>	<i>Ayah Churna, Mukta Bhasma</i>	<i>Pandu</i>
107.	<i>Su.ut.44/26</i>	<i>Manduradi Prayoga</i>	<i>Mandura</i>	<i>Pandu</i>
108.	<i>Su.ut.44/27</i>	<i>Vibhitakdi Shataka</i>	<i>Ayomala</i>	<i>Pandu</i>
109.	<i>Su.ut.44/35</i>	<i>Bhasma Yoga</i>	<i>Swarnamakshika, Shilajatu</i>	<i>Kumbha Kamala</i>
110.	<i>Su.ut.44/36</i>	<i>Lauhakitta Prayoga</i>	<i>Lauhakitta</i>	<i>Kumbha Kamala</i>
111.	<i>Su.ut.44/37</i>	<i>Akshakashtha Dagdha mandura Prayoga</i>	<i>Lauhamala</i>	<i>Kumbha Kamala</i>
112.	<i>Su.ut.44/38-39</i>	<i>Saindhava mandura Prayoga</i>	<i>Lauha Kitta</i>	<i>Pandu, Kumbha Kamala</i>
113.	<i>Su.ut.45/43-44</i>	<i>Asthapana – Anuvasana Yoga</i>	<i>Gairika</i>	<i>Adhoga Raktapitta, Atisara, Raktatisara</i>
114.	<i>Su.ut.46/25</i>	<i>Vataka Yoga</i>	<i>Shilajatu</i>	<i>Sanyasa</i>
115.	<i>Su.ut.48/19</i>	<i>Trushnahara jalam</i>	<i>Swarna, Rajat shalaka/patra</i>	<i>Trushna</i>
116.	<i>Su.ut.50/19</i>	<i>Dhuma Yoga</i>	<i>Manahshila</i>	<i>Hikka</i>
117.	<i>Su.ut.50/20</i>	<i>Leha Yoga</i>	<i>Swarnagairika</i>	<i>Hikka</i>

118.	Su.ut.50/28-29	Hikkahara Yoga	Swarna gairika, Kaseesa	Hikka
119.	Su.ut.52/23	Mustadi Varti Dhumapana	Manahshila, Haritala	Vataja –Kaphaja Kasa
120.	Su.ut.54/33	Trapu Yoga	Vanga	Kaphajanya, Purishjanya Krumi
121.	Su.ut.54/36	Pradhamana Yoga	Ayah Churna	Krumi
122.	Su.ut.59/25	Falgvadi Yoga	Shudha Shilajatu	Sannipataja Mutrakruhra
123.	Su.ut.60/46-53	Lashunadi varga siddha Sarpi	Manahshila, Haritala	Unmada, Apasmara, Sarvagraha Dosha

Su.- Sushruta Samhita, Chi.- Chikitsasthana, Ka. – Kalpasthana, Ut. – Uttarantra

Table 3: References of Herbomineral Preparations in Ashtanga hridaya^[11]

S.No.	Reference	Preparations	Mineral used	Uses
1.	A.Hr.chi.3/149-150	Manahshila Dhumapana	Manahshila	Kshataja Kasa
2.	A.Hr.chi.4/10	Dhumapana varti	Manahshila, Haritala	Hikka Shwasa
3.	A.Hr.chi.6/20	Lehya yoga	Manahshila	Kaphaja Chardi
4.	A.Hr.chi.8/23	Lepa yoga	Tutha	Arsha
5.	A.Hr.chi.12/29-32	Ayaskriti	Lauha	Prameha
6.	A.Hr.chi.12/34-35	Shilajatu Rasayana	Shilajatu	Prameha
7.	A.Hr.chi.12/43-44	Shilajatu Prayoga	Shilajatu	Madhumeha
8.	A.Hr.chi.13/25	Shilajatu Prayoga	Shilajatu	Vidradhi
9.	A.Hr.chi.13/38	Taila yoga	Manahshila	Medoja Vridhhi
10.	A.Hr.chi.14/51	Panartha Yoga	Shilajatu	Vata Gulma
11.	A.Hr.chi.15/41	Pathya Yoga	Shilajatu	Udara Roga
12.	A.Hr.chi.15/75	Shaman Yoga	Ayaskriti	Kaphaja Udara roga
13.	A.Hr.chi.16/9	Panartha Yoga	Ayo Rajah (Lauha)	Pandu
14.	A.Hr.chi.16/14	Navayasa Lauha	Ayo Rajah (Lauha)	Pandu
15.	A.Hr.chi.16/15	Vati Yoga	Mandura	Pandu
16.	A.Hr.chi.16/16-19	Mandura Vataka	Tapyia, Mandura	Pandu
17.	A.Hr.chi.16/20-22	Tapyadi Churna	Tapyia, Raupya, Ayomala	Pandu
18.	A.Hr.chi.16/23-28	Kautajadi Gutika	Shilajatu	Pandu
19.	A.Hr.chi.16/36	Ghrita Yoga	Ayo Rajah (Lauha)	Mrittikajanya Pandu Roga
20.	A.Hr.chi.16/44	Anjana Yoga	Gairika	Kamala
21.	A.Hr.chi.16/52-53	Panartha yoga	Shilajatu, Makshika	Kumbha Kamala
22.	A.Hr.chi.17/3-4	Shodhana Yoga	Ayah, Shilajatu	Shotha
23.	A.Hr.chi.18/26	Lepa Yoga	Kaseesa	Kaphaja Granthi
24.	A.Hr.chi.18/30	Bhedanartha	Makshika, Shilajatu	Granthi
25.	A.Hr.chi.19/42	Vati	Tapyia	Daruna Kushtha
26.	A.Hr.chi.19/46	Churna Yoga	Ayomala	Kushtha
27.	A.Hr.chi.19/48	Pathya	Shilajatu	Kitibha, Shvitra, Dadru
28.	A.Hr.chi.19/49	Sitadi Avaleha	Ayomala	Sarva Kushtha
29.	A.Hr.chi.19/53	Rasayana	Shilajatu	Kushtha
30.	A.Hr.chi.19/67	Dadrushak churna	Kaseesa, Manahshila	Dadru, Kitibha, Pama, Vicharchika
31.	A.Hr.chi.19/70	Lepa Yoga	Manahshila, Haritala	Kushtha
32.	A.Hr.chi.19/71-73	Lepa Yoga	Kaseesa, Manahshila	Sidhma, Kushtha

33.	A.Hr.chi.19/77	Lepa Yoga	Tutha	Vipadika, Charmakushtha, Kitibha, Alasaka
34.	A.Hr.chi.19/81	Mahavajraka Taila	Manahshila, Haritala	Shvitra, Arsha, Granthi
35.	A.Hr.chi.19/84	Vicharchikanashaka Taila	Tutha, Sindoor	Vicharchika, Kacchu
36.	A.Hr.chi.20/13	Lepa Yoga	Haritala	Shvitra
37.	A.Hr.chi.20/16	Lepa Yoga	Shankha, Tutha	Kushtha, Kilasa, Tilakalaka
38.	A.Hr.Ut.2/73	Avachurnana Yoga	Kaseesa, Shankha	Ahiputana
39.	A.Hr.Ut.5/19	Bhutarava Ghrita	Tutha, Manahshila	Grahaghna
40.	A.Hr.Ut.9/20	Anjana Yoga	Pushpakaseesa	Pakshmashta
41.	A.Hr.Ut.9/23	Pratisarana	Kaseesa, Manahshila	Kaphotklisha
42.	A.Hr.Ut.11/5	Churna Anjana	Kaseesa, Lauha, Tamra Bhasma	Puyalasa
43.	A.Hr.Ut.11/6	Pratisarana	Kaseesa	Krumigranthi
44.	A.Hr.Ut.11/12	Anjana	Sphatika, Shankha	Arjuna
45.	A.Hr.Ut.11/24	Anjana	Manahshila	Kaphaja Timira
46.	A.Hr.Ut.11/32	Varti Yoga	Gairika, Shankha, Mukta, Tamra	Shukra
47.	A.Hr.Ut.11/39-41	Mahaneela Gutika	Tamra	Shuddha Shukra
48.	A.Hr.Ut.11/44-47	Anjana Yoga	Shankha	Shukra Roga
49.	A.Hr.Ut.13/19	Timiranashaka Yoga	Tapy, Lauha, Swarna Bhasma	Timira
50.	A.Hr.Ut.13/20-22	Anjana Yoga	Tamra, Ayah (Lauha), Rajat	Timira
51.	A.Hr.Ut.13/23-24	Anjana Yoga	Ayah(Lauha), Tutha, Shankha	Timira
52.	A.Hr.Ut.13/28-30	Bhaskaranjana	Tutha, Tapy, Manahshila	Timira
53.	A.Hr.Ut.13/31-32	Anjana Yoga	Tamra, Haritala, Vanga	Timira
54.	A.Hr.Ut.13/33	Tuthanana	Tutha	Chakshushya
55.	A.Hr.Ut.13/36	Nayanamritanana	Parada, Bhujaga	Timira
56.	A.Hr.Ut.13/41	Sarpavasadyanana	Shankha	Drushtiprada
57.	A.Hr.Ut.13/42	Aprisaranana	Tapy, Tutha	Timira
58.	A.Hr.Ut.13/43	Vibheetakanana	Tutha	Timira
59.	A.Hr.Ut.13/44	Shanmakshika Yoga	Tapy, Tutha	Timira, Arma
60.	A.Hr.Ut.13/45	Anjana Yoga	Rajat, Sphatika, Swarna, Shankha, Tamra, Ayah	Sarvakshi Roga
61.	A.Hr.Ut.13/65	Anjana Yoga	Swarnagairika, Mukta	Pittaja Timira
62.	A.Hr.Ut.13/66	Anjana Yoga	Tutha, Sphatika	Pittaja Timira
63.	A.Hr.Ut.13/70	Vimalavarti	Shankha, Manahshila	Drishti prasada
64.	A.Hr.Ut.13/71	Kokilavarti	Krushna lauha	Drishti prasada
65.	A.Hr.Ut.13/72	Varti Yoga	Shankha	Timira
66.	A.Hr.Ut.13/74	Drakshadi Varti	Tamra, Shankha	Timira
67.	A.Hr.Ut.13/84	Rasakriya	Gairika	Naktandhya
68.	A.Hr.Ut.13/85	Varti	Swarna gairika	Naktandhya
69.	A.Hr.Ut.13/87	Varti	Manahshila, Haritala	Ratrandhya
70.	A.Hr.Ut.13/92	Rasakriya	Swarna gairika	Dhumara roga
71.	A.Hr.Ut.14/24	Mukhalepa	Gairika	Ruja, Raga

72.	A.Hr.Ut.14/31	Pindanjana	Vaidurya, Muktapphala	Drushti prasadana
73.	A.Hr.Ut.16/2	Vidalaka Lepa	Swarna gairika	Netrabhishyanda
74.	A.Hr.Ut.16/7	Pottali kalpa	Tutha	Netrapeeda
75.	A.Hr.Ut.16/23	Varti	Shankha	Pitta Raktajanya Netraroga
76.	A.Hr.Ut.16/24	Varti	Shankha	Kaphaja Netraroga
77.	A.Hr.Ut.16/35	Sandhava Lepa	Shankha	Netra Vedanahara
78.	A.Hr.Ut.16/40-42	Gutika	Lauha, Kaseesa	Netra gharsha, Shopha, Kandu
79.	A.Hr.Ut.16/43	Lepa	Tamra Rajah	Netra shopha, Vedana
80.	A.Hr.Ut.16/48	Parisheka	Tutha	Pilla Roga
81.	A.Hr.Ut.16/52	Anjana	Gairika, Manahshila	Netra Kandu, Kleda
82.	A.Hr.Ut.16/54-55	Varti	Tamra Bhasma, Shankha	Pilla Roga
83.	A.Hr.Ut.16/55-56	Anjana	Kaseesa	Pilla Roga, Pakshmathata
84.	A.Hr.Ut.22/15	Gharshana Prayoga	Tutha	Danta Roga
85.	A.Hr.Ut.22/21	Pottali Kalpa	Kaseesa	Dantashula
86.	A.Hr.Ut.22/30	Pratisaranartha	Gairika	Upakusha Roga
87.	A.Hr.Ut.22/37	Taila Yoga	Gairika	Dantasushira
88.	A.Hr.Ut.22/51	Gharshanartha	Kaseesa	Talupaka
89.	A.Hr.Ut.22/64	Kwatha Yoga	Gairika	Vidradhi
90.	A.Hr.Ut.22/90-94	Khadiradi Gutika	Gairika	Mukharoga
91.	A.Hr.Ut.22/99	Kalaka Churna	Ayah (Lauha)	Mukharoga
92.	A.Hr.Ut.22/100	Peetaka Churna	Manahshila, Haritala	Mukharoga
93.	A.Hr.Ut.22/105	Kwatha Yoga	Gairika	Mukhapaka, Nadivrana
94.	A.Hr.Ut.22/107	Gandusha Yoga	Ayah (Lauha)	Dantadrudhikarana
95.	A.Hr.Ut.24/28	Lepa Yoga	Kaseesa, Tutha, Manahshila	Indralupta
96.	A.Hr.Ut.24/42-43	Lepa Yoga	Ayo Rajah	Palita Roga
97.	A.Hr.Ut.26/26	Taila Yoga	Tutha	Sadyovrana
98.	A.Hr.Ut.30/22	Chandanadi Taila	Manahshila, Haritala	Kushtha, Dushtavrana, Nadivrana, Apachi
99.	A.Hr.Ut.32/1-2	Lepa Yoga	Haritala, Manahshila	Yavaprakhya
100.	A.Hr.Ut.32/13	Lepa Yoga	Kaseesa	Alasa
101.	A.Hr.Ut.32/31-32	Manjishthadi Taila	Hairtala, Gairika, Manahshila	Vyanga, Neelika
102.	A.Hr.Ut.34/4	Lepa Yoga	Tutha, Gairika, Haritala, Manahshila	Upadansha vrana
103.	A.Hr.Ut.34/51	Dhatakyadi Taila	Kaseesa	Vipluta, Upapluta Yonivyapat
104.	A.Hr.Ut.34/55	Churna Yoga	Ayo Rajah, kaseesa	Yoni Paichilya
105.	A.Hr.Ut.35/24	Chandrodaya Agada	Haritala, Manahshila	Visha
106.	A.Hr.Ut.35/39	Dooshivishari Agada	Gairika	Dooshi Visha
107.	A.Hr.Ut.35/56	Churna Yoga	Tapya, Swarna	Gara Visha
108.	A.Hr.Ut.36/91	Mani Prayoga	Vaidurya	Sarva Visha
109.	A.Hr.Ut.37/40	Agada	Haritala	Alivisha
110.	A.Hr.Ut.37/44	Agada	Manahshila	Ratrivrishchika Visha
111.	A.Hr.Ut.37/73	Mandara Agada	Haritala, Gairika, Manahshila	Keta Lootadi Visha
112.	A.Hr.Ut.39/42	Triphala Rasayana	Lauha, Swarna	Sarvarogaghna, Medha, Ayu,

				<i>Smriti, Buddhi Vardhaka</i>
113.	<i>A.Hr.Ut.39/48</i>	<i>Pancharavinda Ghrita</i>	<i>Swarna</i>	<i>Paurusha, Bala Vardhaka</i>
114.	<i>A.Hr.Ut.39/50</i>	<i>Brahmi Rasayana</i>	<i>Swarna</i>	<i>Buddhi, Medhavardhaka, Roganashaka</i>
115.	<i>A.Hr.Ut.39/79</i>	<i>Bhallataka Taila</i>	<i>Shilajatu</i>	<i>Sarva Kushtha</i>
116.	<i>A.Hr.Ut.39/107</i>	<i>Bakuchi Rasayana</i>	<i>Lauha churna</i>	<i>Vardhakyajanya Vikara</i>
117.	<i>A.Hr.Ut.39/130-142S</i>	<i>Shilajatu Rasayana</i>	<i>Shilajatu</i>	<i>Rasayana</i>
118.	<i>A.Hr.Ut.39/149</i>	<i>Leha Yoga</i>	<i>Lauha Bhasma</i>	<i>Jaranashaka</i>
119.	<i>A.Hr.Ut.39/161</i>	<i>Leha Yoga</i>	<i>Shilajatu, Lauha, Parada, Swarnamakshika</i>	<i>Daurbalya</i>
120.	<i>A.Hr.Ut.39/165</i>	<i>Gutika Yoga</i>	<i>Lauha Bhasma</i>	<i>Asadhya Roganashaka, Paurusha vardhaka</i>

A.Hr.- Ashtanga Hridaya, Chi.- Chikitsasthana, Ut.- Uttarasthana

DISCUSSION

Charaka Samhita and Rasashastra

Through the review of *Charaka Samhita* it can be noted that the *Gairika, Haritala, Manahshila* and other minerals are mentioned under *Bhauma Gana* by *Acharya Charaka*. In *Charaka Samhita*, around twenty two varieties of minerals have been mentioned for the purpose of different treatment. Out of these twenty two types of minerals *Lauha Bhasma* and its variants have been utilized the most, i.e, in thirty three preparations *Lauha Bhasma* and its variants are one the ingredient. Second most utilized mineral being the *Manahshila*, which is mentioned as an ingredient in around twenty one preparations. Other minerals like *Gairika, Shilajatu, Kaseesa, Haritala, Shankha, Makshika* and *Tamra* have also been frequently used in many preparations, while some other minerals such as *Tutha, Swarna, Pravala, Gandhaka, Rajat, Mukta*, etc., have been used at a lesser extent.

Sushruta Samhita and Rasashastra

Acharya Sushruta mentioned two *Ganas* namely, *Trapyadi* and *Ushakadi gana* which includes different metals and minerals. Metals and minerals like *Swarna, Rajat* and *Tamra* have been described in *Sushruta Samhita* for medical purposes. *Gandhaka* and *Parada* also described as external medicaments. *Ayaskriti* is the specific contribution of *Acharya Sushruta* as it has been described with more clear understandable approach as compared to *Charaka Samhita*. Through the screening it is noted that around twenty one different types of metals and minerals have been used for treatment in *Sushruta Samhita*. Out of these twenty one varieties, *Manahshila* was used extensively as it is mentioned in around thirty four preparations as an ingredient. *Lauha Bhasma* and *Kaseesa* were second to *Manahshila* in usage as they are mentioned in about twenty six formulations. *Haritala* was also used in

abundance which is reflected through its use in about twenty three formulations. Other minerals like *Gairika, Tutha, Tamra, Shilajatu* and *Swarna* were also mentioned frequently, while some of the minerals and metals such as, *Rajat, Pravala, Shankha, Makshika, Mukta, Vaidurya, Mani, Sindoor, Parada, Kansya, Ratna* and *Vanga* were minimal in use.

Charaka Samhita and *Sushruta Samhita* were representing the condition of *Rasashastra* during the *Samhita Kala*. Before the systematic development of *Rasashastra*, the material regarding the therapeutic uses of Herbomineral Preparations is available in a scattered manner in Ayurvedic literature. The concept of processing *Bhasma* was not developed during the classical age; also the *Dhatu* were being administered in the form of powder (*Rajah*) only. The word *Bhasma* mentioned in *Sushruta Samhita* indicates only the ash of herbal drugs.

Ashtanga Hridaya and Rasashastra

The review of *Ashtanga Hridaya* shows several references for different metals and minerals to be used as remedies. *Acharya Sushruta* and *Vagbhata* mentioned *Parada* and also indicated its use as an external medicament. The references also indicate that the process of *Dhatu Bhasma* was conceived during the time of *Vagbhata*. There are total of about nineteen different varieties of metals and minerals were indicated in *Ashtanga Hridaya* which was used as an ingredient of many therapeutic formulations. It can be noted through the study that, *Lauha Bhasma* was used extensively in *Ashtanga Hridaya* as it is mentioned in around twenty seven preparations. *Manahshila* being the second most widely used ingredient reflected through its usage in twenty four preparations. Other metals and minerals like *Gairika, Tutha, Kaseesa, Haritala, Shankha, Shilajatu* and *Tamra* were also used often, whereas, some of the metals and minerals were very nominal

in use such as, *Swarna, Rajat, Makshika, Mukta, Vaidurya, Sindoor, Parada, Vanga* and *Sphatika*.

CONCLUSION

The review reveals that Herbomineral preparation were in use for medical purposes both internal as well external during the *Samhita kala* also, and gradually it was in developing phase from the time of *Charaka* to the *Vagbhata*. Later, *Rasa Shastra* was developed completely as an independent branch with the extensive use of Herbomineral preparations during *Sangraha Kala*. The reference shows the adequate usage of Herbomineral preparations for treating various conditions as mentioned in *Bruhatrayee*.

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