



SIGNIFICANCE OF *BHRINGARAJA* AS A THOUGHTFUL PROTAGONIST FOR AYURVEDIC PHARMACEUTICAL PROCESS

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ABSTRACT:

Ayurveda is science of life which is useful in maintaining health and to cure disease conditions. There are many plants used since ancient period for this purpose. *Bhringaraja* is one of the plants for such utility. It is used in many patterns for classical applications since Vedic period. It is observed that the application is directly for some specific diseases and also indirectly as an ingredient or *Sodhana Dravya* in many formulations. Here, the application of *Bhringaraja* is discussed as only in pharmaceutical process and efforts are made to evaluate the role of *Bhringaraja* in formulation designing and modelling. The review is useful for understanding the application of various herbs as in classical process to make formulation with special reference to *Bhringaraja*. It is distinguished that *Bhringaraja* might have been used to remove impurities or to add some specific properties or to add synergism mechanism in the formulation.

KEY WORDS: *Bhringaraja*, *Sodhana*, *Bhavana*, Classical formulations, Ayurvedic pharmaceuticals

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ABBREVIATIONS:

A.H.	Ashtanga-hridaya	Pu.Kha.	Purva Khanda
A.S.	Ashtanga-samgraha	R.R.S.	Rasaratna Samuchchaya
Bha.S.	Bhavaprakasha-samhita	S.B.M.	Sidhdhabhesajamanimala
B.R.	Bhaishajya-ratnavali	Sha.S.	Sharangadhara Samhita
B.S.V.	Basavarajiyam	Si.S.	Siddhayogasamgraha
C.D.	Chakradatta	S.Y.	Sahasrayoga
Cha.	Chapter	U.	Uttarasthana
Chi.	Chikitsasthana	U.Kha.	Uttara Khanda
E	External	V.C.	Vaidh Chintamani
G.N.	Gada-nigraha	V.M.	Vrinda Madhava
I	Internal	V.S.	Vangasena-samhita
Ma.Kha.	Madhyama Khanda	Y.R.	Yogaratanakar

INTRODUCTION:

People have used numerous plants in traditional medicine from the dawn of civilisation. *Bhringaraja* is one of the plants which used since Vedic period. *Bhringaraja* commonly known as *Bhangara*, *Bhangaraiya*. Scientific name of the *Bhringaraja* is *Eclipta alba* Hassk and it belongs to *Asteraceae* family. It is very well-known drug for the hair problems and liver disease. *Bhringaraja* is well explore drug in *Ayurveda*. It has *Katu-Tikta Rasa*, *Tikshana*, *Ruksha Guna*, *Ushna Virya*, *Katu Vipaka* and *Kapha Vata Doshahara* properties. In *Ayurveda*, *Bhringaraja* has special attention because of its multidimensional and traditional applications. It used in both internal and external application as well. Also, *Bhringaraja* is used in

Ayurvedic pharmaceuticals of the many drug formulations.

In *Ayurveda* there are some processes (*Samskara*) which should be done before making final drug formulation like, *Sodhana*, *Bhavana*, *Mardana*, *Swedana*, *Nishikta*, etc. This process either done to remove impurities or to enhance the qualities or to add on some specific qualities or to subside the toxic effect of some ingredients. *Bhringaraja* is one of the drugs which is widely used for this purpose. *Bhringaraja* is widely mention in books of *Rasashastra* and *Bhaishajya Kalpana* for making drug formulations and for *Sodhana* of many metals and minerals. Present review is an effort to gather the scattered information of *Bhringaraja* liquid media for pharmaceutical processes in *Ayurvedic* literature, highlighting

its pharmaceutical and therapeutic significance.

Ayurveda. Published articles relevant to topic were screened.

METHODOLOGY

Information extracted from twenty-five books *Samhita* and *Chikitsa-grantha* of the

RESULTS:^{[1],[2],[3],[4],[5],[6],[7],[8],[9],[10],[11],[12],[13],[14],[15],[16],[17],[18],[19],[20],[21],[22],[23],[24],[25]}

Table No. 1 Bhringaraja Swarasa observed as Bhavana Dravya

Sr.No	Context	Indication (s)	I /E	Reference
In Gutika				
1.	<i>Kushthahara Gutika</i>	<i>Kushtha</i>	I	A.S.Chi.21/46
2.	<i>Shuklagata Roga Chikitsa</i>	<i>Arma, Timir, Kacha, etc.</i>	<i>Anjana</i>	V.M.61/267
3.	<i>Rasendra Gutika</i>	<i>Rajyakshma, Kasa</i>	I	C.D.10/31, B.R.14/120
4.	<i>Visha Gutika</i>	<i>Vataroga, Kapharoga, Yakshma, etc.</i>	I	G.N. <i>Gutikadhikara</i> /128
5.	<i>Langali Gutika</i>	<i>Kushtha</i>	I	G.N. <i>Gutikadhikara</i> /131
6.	<i>Abhraka Prayoga</i>	<i>Kasa, Shwasa, Raktakshaya, etc.</i>	I	A.P.2/166
7.	<i>Pratapalankeshwara Rasa</i>	<i>Sannipata Jwara</i>	I	R.R.S.12/123
8.	<i>Mahakalka Rasa</i>	<i>Sarva Roga, Vrishya</i>	I	R.R.S.27/110
9.	<i>Vatari Rasa(dwitiya)</i>	<i>Kapha-vata Roga</i>	I	V.C. <i>Vata Prak.</i> /317
10.	<i>Lohagudhadi Gutika</i>	<i>Pandu</i>	I	S.Y.2/114
In Churna				
11.	<i>Bakuchi Prayoga</i>	<i>Sarvaroga, Twak Vikara</i>	I	A.S.U.49/79
12.	<i>Panch Nimba churna</i>	<i>Kushtha, Visarpa, Vatarakta</i>	I	V.M.51/95, V.S. <i>Kushthadhikara</i> /171,

				Sha.S.M.6/153, Bha.S.M.cha. 54/58, Y.R.Kushtha Chi/5
13.	<i>Kushthahara Churna</i>	<i>Kushtha</i>	I	C.D.49/80
14.	<i>Anjana</i>	<i>Garudopama netra</i>	E <i>Anjana</i>	C.D.58/143
15.	<i>Brihat-panchanimbaka Churna</i>	<i>Sarva Kushtha, Mahakshaya, Arsha, etc.</i>	I	G.N.Churnadhikara/221
16.	<i>Triphala Kalpa</i>	<i>Medhavi, Smrutimana, etc.</i>	I	G.N.Rasayan Tantra 2/113
17.	<i>Shankara Loha</i>	<i>Bhasmaka, Kushtha, Vishama Jwara, etc.</i>	I	V.S.Grahani adhikara/275, Bha.S.M.dwi.5/106
18.	<i>Abhraka Sandhana</i>	<i>Amlapitta, Grahani, Arsha, etc.</i>	I	V.S.Rasayanadhikara/202
19.	<i>Amritarnava Rasa</i>	<i>Jara, Mrityu</i>	I	A.P.1/582, R.R.S.27/82, B.R.73/58
20.	<i>Gandhaka Kalpa</i>	<i>Vridhdha</i>	I	A.P.2/37, A.P.2/46, Y.R.Rasayanadhikarana/1, S.Y.3/38
21.	<i>Parpati Rasa</i>	<i>Jwara, Shwasa, Swarabhanga</i>	I	R.R.S.13/82, B.R.5/1093
22.	<i>Prananatha Rasa</i>	<i>Rajayakshma, Shotha, Udara Roga</i>	I	R.R.S.14/53
23.	<i>Mulakuthara Rasa</i>	<i>Arsha, Plihavidhdhi, etc.</i>	I	R.R.S.15/38
24.	<i>Trailokyatilaka Rasa</i>	<i>Udavarta, Udara, Vibandha, etc.</i>	I	R.R.S.15/75
25.	<i>Grahani-vajrakapata Rasa</i>	<i>Vataja Grahani</i>	I	R.R.S.16/33, Sha.S.M.12/255, V.C.Samgrahani Prak./50, B.S.V. 10 th Prakarana, B.R.8/261
26.	<i>Agnikumara Rasa</i>	<i>Dipana</i>	I	R.R.S.16/136, B.S.V. 12 th Prakarana
27.	<i>Meha-hara Rasa</i>	<i>Prameha</i>	I	R.R.S.17/119

28.	<i>Mehabaddha Rasa</i>	<i>Prameha</i>		R.R.S.17/125, <i>Sha.S.M.12/205</i> , <i>V.C.Prameha Prak./81</i> , <i>B.S.V. 9th</i> <i>Prakarana</i>
29.	<i>Lilavilasa Rasa</i>	<i>Amlapitta</i>		R.R.S.18/206, <i>Y.R.Amlapitta Chi/3</i> , <i>B.S.V. 7th Prakarana</i> , <i>B.R.56/29</i>
30.	<i>Talakeshwara Rasa-1</i>	<i>Kushtha</i>		R.R.S.20/76
31.	<i>Medinisara Rasa</i>	<i>Kushtha, Shwitra,</i> <i>etc.</i>		R.R.S.20/120
32.	<i>Shwitrantaka Rasa</i>	<i>Shwitra</i>		R.R.S.20/167
33.	<i>Timira-nashananjana</i>	<i>Timira</i>	<i>Anjana</i>	R.R.S.23/74
34.	<i>Triphala Rasayana-3</i>	<i>Jara</i>		R.R.S.26/25
35.	<i>Lakshmi Vilasa Rasa</i>	<i>Kshaya</i>		R.R.S.26/44, <i>B.R.15/131</i>
36.	<i>Loha kalpa</i>	<i>Vrishya, Kamala,</i> <i>Pandu, etc.</i>		R.R.S.28/20
37.	<i>Tamra Druti</i>	<i>Netra Roga, Kacha,</i> <i>Arma, etc.</i>	<i>Anjana</i>	R.R.S.28/23
38.	<i>Rasa Kalpa</i>	<i>Prameha</i>		R.R.S.30/39
39.	<i>Swayamagni Rasa</i>	<i>Kshaya, Kasa</i>		<i>Sha.S.M.12/156</i> , <i>V.C.Kshaya</i> <i>Prak./1255</i>
40.	<i>Mahavahni Rasa</i>	<i>Sarva Udara roga</i>		<i>Sha.S.M.12/210</i> , <i>B.R.40/79</i>
41.	<i>Loha Rasayana</i>	<i>Vali-palita, Swasa-</i> <i>Kasa, Pandu</i>		<i>Sha.S.M.12/282</i>
42.	<i>Surya Rasa</i>	<i>Kasa, Swarabheda,</i> <i>Hikka, etc.</i>		<i>V.C. Kasa Prak./86</i> , <i>B.S.V. 8th</i> <i>Prakarana</i>
43.	<i>Meghanada Rasa</i>	<i>Sarva Meha</i>		<i>V.C. Prameha Prak./86</i>
44.	<i>Gandhaka Rasayana-1</i>	<i>Kushtha, Vataroga,</i> <i>Prameha</i>		<i>V.C. Kushtharoga Prak./164</i> , <i>B.S.V.</i> <i>13th Prakarana</i>
45.	<i>Gandhaka Rasayana-</i>	<i>Kushtha, Prameha,</i>		<i>V.C. Kushtharoga Prak./171</i> , <i>Si.S.</i>

	2	<i>Dhatukshaya,</i>		21/3
46.	<i>Jirna Jwarankusha Rasa</i>	<i>Jirna Jwara, Kasa, Kshaya, etc.</i>		Y.R. <i>Rasa</i> /1
47.	<i>Sannipata Bhairava Rasa</i>	<i>Sannipata</i>		Y.R. <i>Rasa</i> /1
48.	<i>Trailokyanatha Rasa</i>	<i>Pandu, Kshaya, Shwasa, etc.</i>		Y.R. <i>Pandu Chi</i> /2
49.	<i>Ratnagiri Rasa</i>	<i>Nava Jwara</i>		B.S.V. 1 st <i>Prakarana</i> , B.R.5/564, B.R.5/565
50.	<i>Jirna Mandura Churna</i>	<i>Kshaya, Kasa, Shwasa, Pandu, etc.</i>		B.S.V. 4 th <i>Prakarana</i> , B.S.V.12 th <i>Prakarana</i>
51.	<i>Kaphavatari Rasa</i>	<i>Kaphavata Roga</i>		B.S.V. 6 th <i>Prakarana</i>
52.	<i>Sarvapitta-vinashaka Rasa</i>	<i>Raktapitta, Sarvapitta</i>		B.S.V. 7 th <i>Prakarana</i>
53.	<i>Bhringaraja Churna</i>	<i>Bhranshapitta</i>		B.S.V. 7 th <i>Prakarana</i> ,
54.	<i>Bahniviryaya Rasa</i>	<i>Udara, Mudhavata,</i>		B.S.V. 11 th <i>Prakarana</i>
55.	<i>Shailendra Rasa</i>	<i>Rishyajihva Kushtha, Sarvakushtha</i>		B.S.V. 13 th <i>Prakarana</i>
56.	<i>Vijaya Rasa</i>	<i>Agnimandhyai</i>		B.R.10/144
57.	<i>Kamalantaka lauha</i>	<i>Prameha, Kasa, Pandu, Kamala, etc.</i>		B.R.12/47
58.	<i>Anandodaya Rasa</i>	<i>Pandu, Aruchi, Mandagni</i>		B.R.12/93
59.	<i>Kshayakeshari Rasa Bhrihat</i>	<i>Sarva Jwara, Sarva Roga</i>		B.R.14/95
60.	<i>Tryambakabhra</i>	<i>Kasa, Shwasa, Hikka, etc.</i>		B.R.17/10
61.	<i>Bhutankusha Rasa</i>	<i>Unmada, Bhutonmada</i>		B.R.24/48

62.	<i>Rasa Mandura</i>	<i>Parinamashula, Amlapitta, Kamala</i>		B.R.30/165, S.Y.3/99
63.	<i>Sudhanidhi</i>	<i>Kamala, Jwara, Shotha, Pandu, etc.</i>		B.R.42/106
64.	<i>Takra-mandura- 2</i>	<i>Pandu, Shotha</i>		B.R.42/120
65.	<i>Rasabhra Mandura</i>	<i>Sarvanga Shotha, Kasa, Shwasa, Pandu, etc.</i>		B.R.42/126
66.	<i>Arkeshwara Rasa</i>	<i>Raktamandala Kushtha</i>		B.R.54/152
67.	<i>Netrashani Rasa</i>	<i>Sarvanetra Roga, Naktandhya, Timir, Kacha, etc.</i>		B.R.64/215
68.	<i>Lavangadi Churna</i>	<i>Grahani, Atisara, Shula, etc.</i>		B.R.68/50
69.	<i>Kamagnisamdipana Rasa</i>	<i>Ojaskara, Rasayana, Sarvarogahara</i>		B.R.74/137
70.	<i>Madayantyadi Churna</i>	<i>Kushtha</i>		Si.S. 21/4
In Vati				
71.	<i>Sarvarogya Vati</i>	<i>Grahani, Kasa, Pandu, etc.</i>		R.R.S.16/68
72.	<i>Vahnijwala Vati</i>	<i>Grahani, Rajayakshma</i>		R.R.S.16/90
73.	<i>Vadavagni Rasa</i>	<i>Agnivridhdhikara</i>		R.R.S.16/106
74.	<i>Vadavamukhi Vati</i>	<i>Shwasa, Kasa, Agnivridhdhikara</i>		R.R.S.16/109
75.	<i>Amrita Vati</i>	<i>Ajirna, Aruchi, Dipana,</i>		R.R.S.16/139
76.	<i>Vaishvanara Rasa</i>	<i>Jalodara</i>		R.R.S.19/25, B.S.V. 11 th <i>Prakarana</i>

77.	<i>Trailokya-sundara Rasa</i>	<i>Pandu, Shopha</i>		R.R.S.19/82, V.C.Pandu Prak./42, B.S.V. 5 th Prakarana, B.R.5/623,
78.	<i>Kushthakuthara Rasa</i>	<i>Sarva Kushtha</i>		R.R.S.20/45
79.	<i>19th Loha Kalpa</i>	<i>Jara, Sarva Roga</i>		R.R.S.28/77
80.	<i>20th Loha Kalpa</i>	<i>Medo Roga, Kapha-vata roga</i>		R.R.S.28/79
81.	<i>23rd Loha Kalpa</i>	<i>Sarva Vyadhi, Rasayana, etc.</i>		R.R.S.28/81
82.	<i>Chintamani Rasa</i>	<i>Kshaya, Kasa, Jirna Jwara, etc.</i>		V.C.Kshaya Prak./194, B.R.5/996, B.R.33/43, Si.S. 16/1
83.	<i>Udayabhaskara Rasa</i>	<i>Pandu, Kamala, Sopha, etc.</i>		V.C.Pandu Prak./57
84.	<i>Narayana Mandura</i>	<i>Pandu, Kasa, Sopha, etc.</i>		V.C.Pandu Prak./91
85.	<i>Vatavidhwamsa Rasa</i>	<i>Sarva Vataroga</i>		V.C.Vata Prak./289, V.C.Vata Prak./351, Y.R.Vata Vyadhi Chi/2
86.	<i>Kalakanta Rasa</i>	<i>Pakshaghata</i>		V.C.Vata Prak./379, B.S.V. 6 th Prakarana
87.	<i>Trailokya Ambar Rasa</i>	<i>Gulma, Jalodara, Shula, etc.</i>		V.C.Udararoga Prak./ 70
88.	<i>Vahni Rasa</i>	<i>Sarva Udararoga, Mudhavata</i>		V.C.Udararoga Prak./ 79
89.	<i>Jwarankusha Rasa</i>	<i>Vishama Jwara</i>		B.S.V. 1 st Prakarana, B.R.5/922
90.	<i>Achintyashakti Rasa</i>	<i>Sarva Jwara</i>		B.R.5/576 B.R.5/576
91.	<i>Saubhagya Vati</i>	<i>Sannipata Jwara, Kasa, Shwasa, etc.</i>		B.R.5/603
92.	<i>Paniya Vatika</i>	<i>Sannipata Jwara</i>		B.R.5/656, B.R.5/670, B.R.5/672
93.	<i>Vishajwarantaka Loha- 3</i>	<i>Visham Jwara, Abhighata Jwara</i>		B.R.5/1137

94.	<i>Vajrakapata Rasa</i>	<i>Asadhya Grahani</i>		B.R.8/290
95.	<i>Mahabhra Vati</i>	<i>Jwara, Atisara, Kasa, Shwasa, etc.</i>		B.R.8/823 B.R.8/824
96.	<i>Piyushavalli Rasa</i>	<i>Atisara, Arsha, Grahani, etc.</i>		B.R.8/837
97.	<i>Jatiphaladi Vati</i>	<i>Kasa, Grahani, Shotha, etc.</i>		B.R.8/393 B.R.8/393
98.	<i>Shilagandhaka Vatika</i>	<i>Sarva Arsha</i>		B.R.9/250
99.	<i>Chandrasuryatmaka Rasa</i>	<i>Pandu, Kamala, etc.</i>		B.R.12/75
100.	<i>Kanchanabhra Rasa-2</i>	<i>Kasa, Kshaya, Shwasa, etc.</i>		B.R.14/145
101.	<i>Kasasamhara-bhairava Rasa</i>	<i>Kasa, Shwasa</i>		B.R.15/85
102.	<i>Bhrihad Rasendra Gutika</i>	<i>Kasa, Shwasa, Kshaya</i>		B.R.15/93
103.	<i>Laghwananda Rasa</i>	<i>Vataroga</i>		B.R.26/125
104.	<i>Kubjavinoda Rasa</i>	<i>Parshwashula, Aamavata, Hridashula, etc.</i>		B.R.26/129
105.	<i>Gulmakalanala Rasa</i>	<i>Gulma, Udararoga, Grahani, etc.</i>		B.R.32/97
106.	<i>Vangeshwara Rasa-3</i>	<i>Mutrakrichchha, Prameha, etc.</i>		B.R.37/155
107.	<i>Shothamkusha Rasa</i>	<i>Sarva Shotha, Pandu, etc.</i>		B.R.42/55
108.	<i>Shwetari Rasa</i>	<i>Shwitra</i>		B.R.54/89
109.	<i>Sarivadi Vati</i>	<i>Sarva Karnaroga, Kshaya, etc.</i>		B.R.62/70
110.	<i>Nayanamrita Lauha</i>	<i>Sarvanetra Roga</i>		B.R.64/223

111.	<i>Garbha Chintamani Rasa-3</i>	<i>Sutikaroga, Garbhini</i>		B.R.68/85
112.	<i>Indushekhara Rasa</i>	<i>Garbhini Jwara, Kasa, Shwasa</i>		B.R.68/90
113.	<i>Balarogantaka Rasa</i>	<i>Sarva Balaroga, Kasa</i>		B.R.71/110
114.	<i>Balarasa</i>	<i>Jwara, Kasa, Shula, Sarvabalaroga</i>		B.R.71/125
115.	<i>Malladi Vati</i>	<i>Shita Jwara</i>		S.B.M. <i>Jwarachikitsa/85</i>
116.	<i>Ashwakanchuki Rasa</i>	<i>Jwara, Shwasa, Vibandha</i>		Si.S. 1/10
In Other				
117.	<i>Sphatikadhyanjana Varti</i>	<i>Netra Roga</i>	<i>Anjana</i>	B.S.V. 17 th <i>Prakarana</i>
118.	<i>Kandachitra Varti</i>	<i>Sarvakshi Roga</i>	<i>Anjana</i>	A.S.U.19/49
119.	<i>Tamra Varti</i>	<i>Netra Roga</i>	<i>Anjana</i>	R.R.S.23/52
120.	<i>Saubhagya Shunthi Leha</i>	<i>Sutika, Kasa, Shwasa, Jwara, etc.</i>		V.C.Pandu <i>Prak./193</i>
121.	<i>Bhrihat-tryushanam Mandura</i>	<i>Vatika-shula, Kaphaja-shula, Amlapitta</i>		V.S.Parinamashuladhikara/74
122.	<i>Nimbadi Taila</i>	<i>Palita</i>	<i>Nasya</i>	V.M.57/142, C.D.54/116, V.S.Kshudrarogadhikara/158, Sha.S.M.9/154

Table No. 2 Bhringaraja Swarasa observed as Mardana Dravya

Sr. No	Context	Indication (s)	I/ E	Reference
In Churna				
1.	<i>Vridhdharu Kalpa</i>	<i>Shwasa, Kasa, Hrida Roga</i>		V.S.Rasayanadhikara/443 V.S.Rasayanadhikara/443
2.	<i>Sarvajwarari Rasa</i>	<i>Sarva Jwara</i>		R.R.S.12/60
3.	<i>Kanakasundar Rasa</i>	<i>Rajayakshma,</i>		R.R.S.14/8, V.C.Atisara <i>Prak./94,</i>

		<i>Shula, Gulma, etc.</i>		Y.R.Rajayakshma Chi/2, V.C.Atisara Prak./84, B.S.V. 10 th Prakarana, B.R.14/199
4.	<i>Paradadi Lepa</i>	<i>Vrana-lekhana</i>	<i>Lepa</i>	R.R.S.24/101
5.	<i>Trivikrama Rasa</i>	<i>Sannipata</i>		V.C.Sannipata Prak./128
6.	<i>Dhanwantari Rasa</i>	<i>Sannipata</i>		V.C.Sannipata Prak./167
7.	<i>Agatsya Sutaraja Rasa</i>	<i>Grahani, Shula, Agnimandhya</i>		V.C.Samgrahani Prak./82, B.R.8/515
8.	<i>Gajakeshari Rasa</i>	<i>Kusuma Pitta</i>		V.C.Pitta Prak./238
9.	<i>Pittabhanjana Rasa</i>	<i>Kshudha Pitta</i>		V.C.Pitta Prak./248
10.	<i>Trailokya Chintamani</i>	<i>Vata vyadhi, Kasa, Kshaya, etc.</i>		Y.R.Rajayakshma Chi/3
11.	<i>Pashupatasra Rasa</i>	<i>Sarva Ahika Jwara</i>		B.S.V. 1 st Prakarana
12.	<i>Rudra Parpati</i>	<i>Vataja Kasa</i>		B.S.V. 8 th Prakarana
13.	<i>Taleshwara Rasa</i>	<i>Kshata Kasa, Kasa, Shwasa, etc.</i>		B.S.V. 8 th Prakarana
14.	<i>Rajarajeshwara Rasa</i>	<i>Dadru, Kitibha, Mandalakushtha,</i>		B.R.54/136
15.	<i>Shitapitta-bhanjana Rasa</i>	<i>Shitapitta, Udarda, Sarva Kushtha</i>		B.R.55/30
In Gutika				
16.	<i>Lokanatha Gutika</i>	<i>Sannipata Jwara</i>		R.R.S.12/81, B.S.V.4 th Prakarana,
17.	<i>Chandrasahasa Rasa</i>	<i>Sannipata Jwara, Ashta Jwara</i>		V.C.Jwara Prak./609
18.	<i>Yoganatha Rasa</i>	<i>Sannipata, Tridoshaja Vyadhi</i>		V.C.Sannipata Prak./208
19.	<i>Phalatraya Gutika</i>	<i>Shwasa, Kasa</i>		V.C.Shwasa Prak./109, S.Y.2/58
In Vati				
20.	<i>Tripurantak Rasa</i>	<i>Sarva Jwara</i>		V.C.Jwara Prak./527
21.	<i>Hutashana Rasa</i>	<i>Ajrna Jwara, Kasa, Shwasa, etc.</i>		V.C.Jwara Prak./573

22.	<i>Karunya Bhairava Rasa</i>	<i>Pralapa Sannipata</i>		V.C.Sannipata Prak./114
23.	<i>Mrita Sanjivani Rasa</i>	<i>Sannipata</i>		V.C.Sannipata Prak./164
24.	<i>Shophari Rasa</i>	<i>Shopha, Pandu, Hikka, Shwasa, etc.</i>		V.C.Shopha Prak./80, B.S.V. 5 th Prakarana
25.	<i>Atisarahara Yoga</i>	<i>Atisara</i>		V.C.Samgrahani Prak./47
26.	<i>Ksharatamra Rasa</i>	<i>Grahani, Kasa, Shwasa</i>		V.C.Samgrahani Prak./88
27.	<i>Vahnikumar Rasa</i>	<i>Kasa, Shwasa, Pliharoga</i>		V.C.Vata Prak./285
28.	<i>Shulakuthar Rasa</i>	<i>Sarva Shula</i>		V.C.Shula Prak./72, B.S.V. 19 th Prakarana, S.Y.2/131
29.	<i>Garaladi Vati</i>	<i>Sarva Shula, Mudhavata</i>		V.C.Shula Prak./133
30.	<i>Gulmakuthar Rasa</i>	<i>Gulma</i>		V.C.Gulma Prak./48
31.	<i>Chinchashankha Vatika</i>	<i>Sarva Shula, Grahani, Visuchika</i>		V.C.Gulma Prak./92, Y.R.Gulma Chi/3
32.	<i>Sutashekhar Rasa</i>	<i>Amlapitta, Kasa, Gulma, etc.</i>		V.C.Amlapitta Prak./37, Si.S. 5/2
33.	<i>Mahapraneshwar Rasa</i>	<i>Kasa, Shwasa, Grahani, etc.</i>		V.C.Amlapitta Prak./48
34.	<i>Ajirnaharo Rasa</i>	<i>Pliha, Gulma, Jalodara, etc.</i>		Y.R.Ajirna Chi/2
35.	<i>Amrutanka Rasa</i>	<i>Panchakasa, Kaphajaroga, Vataroga</i>		B.S.V. 8 th Prakarana
36.	<i>Shulari Rasa</i>	<i>Shula, Gulma, Udavarta etc.</i>		B.S.V. 19 th Prakarana
37.	<i>Jwarakeshari Rasa</i>	<i>Vishama Jwara, Taruna Jwara, Ajirna, etc.</i>		B.R.5/585, B.R.5/870

38.	<i>Abhra Vatika</i>	<i>Kasa, Shwasa, Kshaya, etc.</i>		6/95
39.	<i>Shrivaidhyanatha Vatika</i>	<i>Grahani, Amavata, Agnimandhya, etc.</i>		B.R.8/302
				B.R.8/804
				B.R.8/804
40.	<i>Aam-parpatika</i>	<i>Grahani, Jwara, Atisara, etc.</i>		B.R.8/809
41.	<i>Rasabhra Vati</i>	<i>Jwara, Atisara, Kasa, Grahani, etc.</i>		B.R.8/816
				B.R.8/824
42.	<i>Amritakalpa Vati</i>	<i>Mandagni, Ajirna</i>		B.R.10/96
43.	<i>Sarveshwara Rasa</i>	<i>Sarva Prameha</i>		B.R.37/170
44.	<i>Chulika Vati</i>	<i>Udara, Shotha, Pandu, Pliha, etc.</i>		B.R.40/83
45.	<i>Yakritplihari Lauha</i>	<i>Pliharoga, Yakrit Roga</i>		B.R.41/111
46.	<i>Shlipadagajakeshari Rasa</i>	<i>Shlipada, Pliharoga</i>		B.R.45/27, S.Y.2/134
47.	<i>Bhaskaramritabhraka</i>	<i>Amlapitta, Durjaya Kasa, Shwasa, etc.</i>		B.R.56/35
48.	<i>Shirorogahara Rasa</i>	<i>Sarva Shiroroga</i>		B.R.65/66
In Varti				
49.	<i>Triphaladi Gulika</i>	<i>Timir, Arma, Kacha, etc.</i>	<i>Anjana</i>	S.Y.Netraroga Chi./196
50.	<i>Garudanjana</i>	<i>Timir, Patararoga, Kacha</i>	<i>Anjana</i>	V.C.Netraroga Prak./114, B.S.V. 17 th Prakarana
51.	<i>Netra Varti</i>	<i>Timir, Patala, Pushpa, etc.</i>	<i>Anjana</i>	V.C.Netraroga Prak./135
In Leha				
52.	<i>Abhra Haritaki</i>	<i>Tridosha Arsha</i>		V.C.Arsha Prak./132

Table No. 3 *Bhringaraja Swarasa* observed in other pharmaceutical process

Sr. No	Context	Indication (s)	I/ E	Process	Dosage form	Reference
1.	<i>Sisaka Shalaka</i>	<i>Netraroga</i>	-	<i>Nishikta</i>	-	A.H.Chi. 13/34, V.M.61/192, V.M.61/193, C.D.58/144, G.N. <i>Shalakya Tantra</i> 3/411, G.N. <i>Shalakya Tantra</i> 3/413, V.S. <i>Netrarogadhikar/35</i> 3, V.S. <i>Netrarogadhikar/35</i> 5, Sha.U.13/115, Bha.M.cha.63/194, Y.R. <i>Netraroga Chi/1</i> , B.R.64/104, B.R.64/105, S.Y.U. <i>Netraroga Chi./157</i>
2.	<i>Gandhaka Shudhdhi</i>	-	-	<i>Pluta</i>	-	C.D.51/38
3.	<i>Gandhaka Shudhdhi</i>	-	-	<i>Kshipta</i>	-	C.D.51/39
4.	<i>Timirahara Anjana</i>	<i>Timira</i>	<i>Anjana</i>	<i>Pluta</i>	<i>Churna</i>	V.S. <i>Netrarogadhikara/3</i> 09
5.	<i>Pippalyadi Anjana</i>	<i>Arma, Timir, Kach, etc.</i>	<i>Anjana</i>	<i>Pishta</i>	<i>Gutika</i>	V.S. <i>Netrarogadhikara/4</i> 82

6.	<i>Rasa Parpati</i>	<i>Arsha, Grahani, Pandu, etc.</i>	I	<i>Swedana</i>	<i>Churna</i>	V.S.Rasayanadhikara/45, Bha.S.M.Pra.1/193, B.R.8/406, Si.S. 2/16
7.	<i>Bandhan Sanskara of Parada</i>	-	-	<i>Swedana</i>	-	A.P.1/94
8.	<i>Niyamana Sanskara of Parada</i>	-	-	<i>Swedana</i>	-	A.P.1/95, B.S.V. 25 th <i>Prakarana</i>
9.	<i>Gandhaka Shudhdhi</i>	-	-	<i>Kshipta</i>	-	A.P.2/30, R.R.S.3/24, S.Y.U.11/21
10.	<i>Manahshila Shudhdhi</i>	-	-	<i>Swedana</i>	-	A.P.2/221, A.P.2/223, R.R.S.3/96, B.S.V. 25 th <i>Prakarana</i>
11.	<i>Srotonjana/Sauviranjana Shudhdhi</i>	-	-	<i>Swedana</i>	-	A.P.2/232, V.C.Shuddhi Prak./476, B.S.V. 25 th <i>Prakarana</i>
12.	<i>Nilanjana</i>	-	-	<i>Swedana</i>	-	A.P.2/239, R.R.S.3/96
13.	<i>Kasisa Shudhdhi</i>	-	-	<i>Swedana</i>	-	A.P.2/275, R.R.S.3/54, V.C.Shuddhi Prak./484, B.S.V. 25 th <i>Prakarana</i>
14.	<i>Shilajatu Shudhdhi</i>	-	-	<i>Pishta</i>	-	A.P.4/119, R.R.S.2/108, Sha.M.11/94, <i>Shuddhi Prak./553</i>
15.	<i>Jaluaka Bandha of Parada</i>	-	-	<i>Nishikta</i>	-	R.R.S.11/100, R.R.S.11/107
16.	<i>Mahabhra-satwa Bhasma</i>	<i>Sarva Roga</i>	I	<i>Kshipta</i>	<i>Churna</i>	R.R.S.27/57
17.	<i>Kantanagakh</i>	<i>Netra Roga</i>	-	<i>Prakshal</i>	-	R.R.S.28/82

	<i>ya Loha Kalpa</i>			<i>ana of shalaka</i>		
18.	<i>Jwalanala Rasa</i>	<i>Ajirna, Grahani, Atisara</i>	I	<i>Ghrishta</i>	<i>Churna</i>	Bha.M.dwi.6/86
19.	<i>Madebhasin hasuto Rasa</i>	<i>Jwara, Kasa, Raktapitta, etc.</i>	I	<i>Bhrushta</i>	<i>Gulika</i>	Y.R.Pandu Chi/2, Y.R.Gulma Chi/2
20.	<i>Pippalyadi Gudikanjana</i>	<i>Arma, Timir, Kacha, etc.</i>	<i>Anjana</i>	<i>Pishta</i>	<i>Gutika</i>	B.R.64/134
21.	<i>Haridradi Varti</i>	<i>Sarvanetra Roga, Picchiti, etc.</i>	<i>Anjana</i>	<i>Pishta</i>	<i>Varti</i>	B.R.64/158
22.	<i>Arsha Chikitsa</i>	<i>Arsha</i>	I	<i>Pishtva</i>	<i>Vati</i>	S.B.M. Arsh Chikitsa/45
23.	<i>Kasahari Varti</i>	<i>Kasa</i>	<i>Dhuma pana</i>	<i>Pishtava</i>	<i>Varti</i>	S.Y.2/28
24.	<i>Tuvarakadi Gulika</i>	<i>Kushtha</i>	I	<i>Pishtava</i>	<i>Gulika</i>	S.Y.2/55
25.	<i>Bhupati Gulika</i>	<i>Sarvashula</i>	I	<i>Pishtava</i>	<i>Gulika</i>	S.Y.2/86
26.	<i>Vayu Gulika</i>	<i>Vatakshobha</i>	I	<i>Pishtava</i>	<i>Gulika</i>	S.Y.2/118
27.	<i>Marichadi Gulika</i>	<i>Patalaroga, Timir, etc.</i>	<i>Anjana</i>	<i>Pishta</i>	<i>Gulika</i>	S.Y.Netraroga Chi./265

It is observed that various words are used like *Bhavana*, *Pishta*, *Ghrishta*, *Bhrishta*, *Mardana* etc. are used for pharmaceutical procedure. Only *Swarasa Kalpana* of *Bhringaraja* is used in Ayurvedic Pharmaceutical processes. It is observed that

Bhringaraja has been used total 206 times in pharmaceuticals processes in approx. 210 formulations as *Bhavana Dravya* with other drugs in different classical texts. Various other processes are also observed like mention below in table No. 4.

Table No. 4: *Bhringaraja* total times used in Various processes in various classical texts

Procedure	No of times <i>Bhringaraja</i> used
For <i>Bhavana</i>	206 times.
For <i>Mardana</i>	84 times
For <i>Pishta</i>	15 times
For <i>Kshipta</i>	12 times
For <i>Nishikta</i>	11 times
For <i>Swedana</i>	11 times
For <i>Pluta</i>	3 times
For <i>Ghrishta</i>	2 times
For <i>Sodhana</i>	1 time
For <i>Bhrishta</i>	1 time
For <i>Sechana</i>	1 time

DISCUSSION:

Different pharmaceutical techniques are scientifically designed by ancient Ayurvedic scholars. *Bhavana* is a unique pharmaceutical process in which a drug or mixture of drugs in powdered form is triturated with sufficient quantity of liquid media till liquid portion gets absorbed completely. *Mardana* is process in which means macerations without liquid media. But here *Mardana* is done with liquid media like *Bhringaraja Swarasa* and others. *Mardana* is used to reduce particle size. *Pishta* means to grinding with or without liquid media. It is one type of *Bhavana* *Nishikta* means make substance red hot, then quench in liquid media, collect substance after self-cooling and it make substance brittle and soft. *Pluta*

means to soak substance in liquid media. *Ghrishta* means to rub substance to remove impurities. *Bhrishta* means roasting with or without liquid. All these procedures are used to removal of physical and chemical impurities, to detoxify, to reduction of hardness, to reduction in particle size, to increased brittleness, softness and malleability, to turn material from heterogeneous to homogenous, to transfer of certain properties and qualities, to augment the qualities, to potentiate therapeutic efficacy, to make the substance fit for further processing.

Bhringaraja is not used in pharmaceutical process in *Charaka Samhita* and *Sushruta Samhita*. First time *Bhringaraja* mentioned as *Bhavana Drvaya* in *Ashtanga*

samgraha in *Kushtha Chikitsa*. Later on, other *Acharya* also mentioned *Bhringaraja* in pharmaceutical process of many formulations for different purposes. *Bhringaraja* is used as *Bhavana Dravya* in many classical formulations which are now-a-days we used like *Lavangadi Churna*, *Sutasekhar Rasa*, *Grahanikapata Rasa*, *Vatavidhwamsha Rasa*, etc. These formulations are used for many diseases like *Kasa*, *Shwasa*, *Amlapitta*, *Grahani*, *Agnimandhya*, *Vataroga*, etc. It is used in *Sodhana* of the metals and minerals like *Parada*, *Kasisa*, *Gandhaka*, *Manahshila*, *Anjana* etc; to get rid of their toxicity or impurity and make them accessible for formulation. It is also used in making of the *Bhasma* of various minerals and metals. It may be used in *Rasa* preparation during process to surge potency of the *Rasa Dravya*. It is used in some formulation to incorporate its properties in formulation. There are two types of *Bhringaraja* used in pharmaceutical process. We might say that *Bhringaraja* is used in *Vata* and *Kapha* dominant diseases. It has *Katu Rasa*, *Ushna Virya*, *Tikshna Guna* which might be help to remove excessive *Kapha Dosha* in body. Due to its *Ushna Virya* it may be subside the *Vata Dosha*. It may be work in chronic diseases due to its *Rasayana* properties. From this review we may say that its works on all

system especially respiratory, digestive, skin, eye.

CONCLUSION:

Ayurvedic pharmaceutical methods are mentioned not only for the manufacturing process of the drug formulation, but also for increasing the bioavailability, potency and purity of the drug formulation. *Bhringaraja* is used since Vedic period for therapeutics purposes. It is used as main ingredient or with other drugs in combinations. It is used in pharmaceutical process of many formulations due to its properties and easily availability. It is used in formulation which designated for the digestive system, respiratory system, skin, eyes.

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