

CRITICAL REVIEW ON MADHUMALINI VASANTA: A KHARALIYA-RASAYANA

Rakesh Ganvir¹, Suraj P. Rathod², Swati Dongre³

Asst professor Dept. of Rasashastra, Shri K R Pandav Ayurved College and Hospital, Nagpur, Maharashtra, India
Assistant Professor Kaychikitsa Department, Shri K R PANDAV Ayurved College & Hospital Bahadura Nagpur, Maharashtra, India

Asst professor Dept. of Rasashastra & Bhaishajya Kalpana, Shree Ayurved college, Nagpur, Maharashtra, India

Email: rakeshganvir26@gmail.com

ABSTRACT

Rasashastra deals with Mercury and its allies (minerals, metals), their therapeutics. *Rasashastra* is a branch which deals with pharmaceuticals of *Rasaushdhies*. Pharmaceutical technology includes various samskara (processing) like *Shodhana* (purification), *Jarana* (Roasting), *Marana* (Incineration) etc. *Vasanta Malati Rasa Kalpa* is herbo-metallic compounds which come under subheading of *Kharaliya-Rasayana* of *Rasaushadhies*. *Madhumalini vasanta*, is mentioned in earlier textbooks like *Rasachandanshu* and later textbooks like *Rasa Tantra Sara Va Siddha Prayog Sangraha*. The main ingredients of *Madhumalini Vasant* are *Shuddha Hingula*, *Kukkutanda* (Whole Egg), *Shweta Marich* (Piper Nigrum), *Priyangu* (*Callicarpama Crophylla*), *Kachora* (*Curcuma zedoaria*) and *Dadim* (*Punica granatum*), *Nimbu* (*Citrus acida*) used as *Bhavanadravya*. It is used in chronic fever, cough, beneficial in pregnancy with debility, anaemia, asthma, chronic respiratory problems.

Key words: *Madhumalini Vasanta*., *Rasaushadhihas*, *Vasanta kalpa*.

INTRODUCTION

Madhumalini Vasanta Rasa comes under *Khalviya Rasayana* category of *Rasaushadhi*. Processed metal, minerals and poisons with herbal drug helps this formulation to increase shelf life. It is palatable and effective in low doses. These boons are accompanied in relatively less doses. Therefore, *Khalviya Rasayana* is more popular than other dosage form. fine, of doughy consistency¹. Bhavana process is the important principle involved in formulating *Khalviya Rasa* are *Samyojana* i.e. mixing of ingredients in specified manner and Bhavana i.e. levigating drugs with media till mass becomes completed in two phases. In first phase,

continuous grinding is done with specific liquid media for time limit, in second phase the levigated mass can dry completely. In the phase of grinding the materials are mixed and grinded continuously mixing with some specific liquid media for a period. The liquid media is mixed little by little, until the material become soft doughy mass. Continuous grinding is very important, because interruption in grinding causes dryness of material which needs addition of more liquid in levigation. After grinding the soft doughy mass can dry completely. The drying may be done in sunlight or in shade, may be in mass form or after making pellets. Although

the chief desired characters of levigation are perceived after grinding, but the desired qualities of levigated material must be achieved after drying. If repetition of *Bhavana* is mentioned, then one *Bhavana* is given after complete dryness of the previous. The drug used for the study is “*Madhu Malini Vasantha*” has been mentioned in the classics like *Rasa chandamshu*, and in the later textbooks like *Rasa Tantra sarava Siddha Prayoga Samgraha*.² The ingredients of this yoga are *Hingula*, *Priyangu*, *Kachora*, *Shweta Maricha*, *Kukkutand Rasa*. In formulation of *Madhumalini Vasanta Rasa*, *Bhavana* of *Dadimswarasa* and *Nimbu Swarasa* (lemon juice) has been utilized. It is used as *Balya*, *Vrushya*, *Rasayana*, *Garbhavruddhikar*. It is used in chronic fever, cough, beneficial in pregnancy with debility, anaemia, asthma, chronic respiratory problems.³

Aim and Objective

1. To do Literature study of *Madhumalini Vasanta Rasa* and its content.
2. To study the preparation *Madhumalini Vasant* as per *Rasachandanshu*.

Material and Method-

Material-It includes

- 1] Major raw drugs- *Hingula*
- 2] Associated raw drugs
 - *Aardrakaswarasa*-for *Hingula Shodhana*
 - *Dadimswarasa* –for *bhavana* to *Shuddha Hingula*
 - *Nimbuswarasa* –for *bhavana* to *Madhumalini vasant*.
- 3] Main equipment and associated equipment
 - **Main**-*Khalva Yantra*
 - **Associated**-Gas stove, silk cloth, knife, utensils, spoon, Glass beaker, Plastic beaker

Table 1: Showing the Ingredients of *Madhumalini Vasanta* & their Pharmacological Actions⁴

S.No	Dravya	Rasa	Guna	Virya	Vipaka	Doshghnata	Karma
1.	<i>Hingula</i> : Cinnabar Sulphide of Mercury	<i>Tikta</i> , <i>Kashaya</i>				<i>Sarva-</i> <i>doshaghna</i>	<i>Deepana</i> , <i>Atirasayana</i> , <i>Sarvarogahara</i> , <i>Vrushya</i>
2.	<i>Priyangu</i> : Callicarpa Macrophylla Vahl	<i>Tikta</i> , <i>Madura Ka-</i> <i>saya</i>	<i>Sita</i> , <i>Guru</i> , <i>Ruksha</i>	<i>Sita</i>	<i>Katu</i>	<i>Kaphahara</i> , <i>Pittahara</i>	<i>Sangrahi</i> , <i>Balakrita</i> , <i>Rakaprasadana</i>
3.	<i>Kachoor</i> : Curcuma zedoria Rose	<i>Thikta</i> <i>Katu</i> ,	<i>Laghu</i> <i>Teekshna</i>	<i>Usna</i>	<i>Katu</i>	<i>Kaphahara</i> , <i>Vatahara</i>	<i>Ruchya</i> , <i>Mukha</i> <i>vaisadyakara</i>
4	<i>Safed Mar-</i> <i>ich</i> : Piper nigrum	<i>Katu</i> , <i>Thikta</i>	<i>Lagu</i> , <i>Ruksha Tik-</i> <i>shna</i>	<i>Usna</i>	<i>Katu</i>	<i>Sleshmahara</i> , <i>Kaphavatajit</i> <i>Vatahara</i>	<i>Dipana</i> , <i>Medohara</i> , <i>Ruchya</i> , <i>Chedi</i> <i>Vataroga</i>
5	<i>Dadima</i> : Punica granatum	<i>Madura</i> <i>Amla</i> <i>Kashaya</i>	<i>Laghu</i> <i>Snigdha</i>	<i>Usna</i>	<i>Ma-</i> <i>dura</i>	<i>Kaphahara</i> , <i>Pittahara</i> , <i>Vatahara</i>	<i>Pacana</i> , <i>Ruchya</i> , <i>Sramahara</i> , <i>Balya</i> , <i>Hridya</i>
6	<i>Kukudanda</i> Rasa	<i>Madhura</i>	<i>Guru</i> <i>Snigdha</i>	<i>Yellow is usna</i> <i>white is sita</i>	<i>Ma-</i> <i>dura</i>	<i>Vaa-</i> <i>tashamaka</i>	<i>Vedanastapana</i> , <i>Vrushya</i>

A. **Methods:** Preparation of *Madhumalini Vasant* included Different steps as follow-

- B. *Hingula Shodhana* by giving 7 *Bhavana* of *Aardrakaswarasa*
- C. 7 *Bhavana* of *Dadim Swarasa* to *Shuddha Hingula*

D. *Kukkutand* (White+Yellow) blended with *Hingula* mixture on *Mandagni* and 7 Bhavana of *Nimbuswarasa* to mixture.

E. Tableting of Madhumalini Vasant

A] Shodhan of Hingula⁵- *Shodhan of Hingula* by seven Bhavana of *Aardraka Swarasa*.

Equipment's Required - *Khalwa Yantra* [mortar and pestle], Measuring beaker and spoon.

Procedure –

1. 100 gm of *Asuddha Hingula* powder is taken in *Khalwa Yantra*.
2. Then, *Bhavanadravya*, *Aardrakaswaras* is added in *Khalwa Yantra* till all the *Hingula* in it get totally wet.
3. Then, *Hingula* powder is subjected to trituration by *Aardrakaswarasa*.
4. Trituration is done till *Aardrakaswarasa* is soaked in *Hingula* and its powder got dried.
5. Same procedure is repeated for all the seven Bhavana.
6. *Aardraka Swaras* is added for each Bhavana as per the requirement.
7. Finally, *Shuddha Hingula* after seventh Bhavana is collected and preserved.

Precautions –

- a) While triturating, precaution should be taken that the material present in the mortar does not fall outside to prevent loss.
- b) After each *Bhavana*, *Hingula* from *Khalwa Yantra* should be removed totally to measure exact weight gain or weight loss.

B) Bhavana of Dadimswarasa to Shuddha Hingula.⁶

Equipment's Required – *Khalwa Yantra* [mortar and pestle], Measuring beaker and spoon.

Procedure –

1. *Ashuddha Hingula* powder is taken in a *Khalwa Yantra*.
2. Then, *Bhavanadravya*, *Dadimswaras* is added to the *Hingula* till it got totally wet.
3. Then, *Hingula* powder is subjected to trituration by *Dadimswarasa*.
4. Trituration is done till *Dadimswaras* is soaked in *Hingula* and its powder got dried.

5. The procedure is repeated for all the seven Bhavana.

6. *Dadimswaras* is added for each Bhavana as per the requirement.

7. Finally, *Shuddha Hingula* after seventh Bhavana is collected and preserved.

Precautions –

- a) While triturating, precaution should be taken that the material present in the mortar does not fall outside to prevent loss.
- b) After each *Bhavana*, *Hingula* from *Khalwa Yantra* should be removed totally to measure exact weight gain or weight loss.

C) Preparation of Madhumalini vasant⁷

Drugs used-*Shuddha Hingula*-100gm

- *Kukkutand* (Whole Egg)-100 gm
- *Shweta Maricha Churna*-
- *Priyangu Churna*-
- *Kachora Churna*-
- *Bhavana Dravya-Limbu Swarasa*-as per requirement

Equipment's- *Khalwa Yantra*, Gas stove, Silk cloth, knife, utensils iron vessel, spoon, Glass beaker, Plastic beaker

Procedure-

1. 100 gm *Shuddha Hingula* is taken in an iron vessel and exposed to *mandagni*.
2. Then same quantity of *Kukkutand* (Egg Yolk) i.e. 100 gm is added to the *Hingula* mixture and it is kept constantly stirring with an iron rod.
3. The process is continued till all egg yolk gets blended with the *Hingula*.
4. *Mandagni* is given for 10 min till mixture is dried properly and reddish coloured.
5. When mixture is properly dried, then heating is stopped, and 120 gm mixture is obtained.
6. After cooling the *Hingula* mixture attained small tablet form.
7. After that, ½ quantity of *Hingula* mixture i.e.60 gm of each *Shweta Maricha*, *Priyangu* and *Kachora* powder were taken in *Khalvayantra* and mixed uniformly.
8. 300 gm of *Hingula* mixture is obtained.

9. The mixture is given 7 Bhavana of *Nimbuswarasa*. This formulation is called *Madhumalinivasant*.
10. On drying, tablets having uniform shape, size and weight were prepared.

Precaution-

Slow and steady heat is given to *Hingula* and *Kukkutand* yolk to avoid ash and black coloured formation.

- a. The mixture is constantly stirred with an iron rod. *Hingula* is completely blended with *Kukkutand* till dried granules were formed.
- b. After obtaining dried granules, heat is stopped.

D) Preparation of *Malini Vasanta Rasa* tablet

Equipment's: S. S. tray, sieve, weighing balance, oven, tablet compression machine.

Ingredient: *Madhumalini Vasanta Rasa* powder – 287 gm, Binding agent –Gum Acacia 5 %

Procedure:

- 1] *Madhumalini Vasanta Rasa* is taken in *Khalva* Yantra then enough quantity of water and 5% of Gum acacia is added into it as a binding agent and mixed uniformly then dough mass is made.
- 2] After that, dough mass is made into small pieces and kept in sun light for drying.
- 3] Granules were made from dough dried mass with the help of granulator having 2.00 mm sieve and rotated in forward direction. Finally, each 120 mg tablets were prepared in 16 stations, Rotary tablet compression machine. Tablet is kept in airtight container.

Precautions:

- a) The tablet machine is cleaned properly.
- b) Proper quantity of water is added slowly to make homogenous mass formation.

DISCUSSION

In pharmaceutical field, Bhavana is used in various way like *Shodhana*, *Marana*, *Satwa Patana* and during preparation of any formulations. When it is applied for *Shodhana* purpose it helps mainly to eliminate unwanted qualities, increase the therapeutic potency and increase the bioavailability of the drug. In *Khalviya Rasayana*, *Bhavanais* to potentiate action of *Khalviya Rasa*, it may be achieved either by synergistic effect or removal of undesirable properties by antagonistic effect. To synergies effect, either drugs of similar

therapeutic efficacy are used as a Bhavana drug or drugs increasing target specificity or absorption/bio-availability are utilized. Bhavana principle can be correlated with levigation or wet grinding. The wet grinding eliminates the hazards of dust. It is also found interestingly in practice that finer size can be achieved by wet grinding than by dry grinding. In formulation of *Madhumalini Vasanta Rasa*, Bhavana of *Dadim swarasa* and *Nimbu Swarasa* (lemon juice) has been utilized. Firstly, Bhavana with freshly prepared *Dadim* is stated. This is followed by Bhavana with *Nimbu Swarasa* (lemon juice) until compound get rid of greasiness. Here Bhavana by freshly prepared *Dadim* impart additive effect to *Madhumalini Vasanta Rasa*. *Hingula* and *Maricha* both are *Ruksha* in nature. Addition of *Dadim* balances *Teekshna* property of *Maricha* and *Hingula*. Both *Bhavana Dravya* are source of many vital nutrients and antioxidants. Lemon juice is also rich in vitamins, minerals and alkaline salt with less fructose sugar. These trace elements may get imparted to formulation during levigation. According to *Ashtanga Sangraha*, *Priyangu* has the property “*Bhagna Sandhana-kriith* and *Brunhana*.” *Priyangu* possess both *Guru* and *Rukshaguna*. It is *Tikta Kashaya* and *Madhura* in *Rasa* by *Vipaka* it is *Katu* and by virtue of its *Veerya* it is *Sheeta*. It is said to be *Tridoshshamaka* especially *Vatapittashamak* and *Vedanasthapana*. *Kachora* is *Laghu* and *Tikshna* in *guna* and *Ushna Veerya*. It is *Tikta* and *Katu* in *Rasa*. By *vipaka* it is *Katu* and it said to be *Kaphavatashamaka* *Kachora* is *Vedana Shamaka* and *Shothhara* and *Anulomana* in nature.⁸ The dehusked black pepper is known as *Safed Maricha* is *Laghu* and *teekshna* in *Guna* and *Katu* in *Rasa* and *Vipaka*, its *Ushna* in *Veerya*. Owing to these attribution *Safed Maricha* is generally considered to be *Vatakapha Shamaka*. Also, according to modern nutritional values Pepper contains- Vitamin C, Vitamin K, Calcium, Magnesium. *Maricha* is the second chief ingredient of *Madhumalini Vasanta Rasa* stated by all texts. *Yogaratanakara* has described *Maricha Shodhana* where fruits are dipped in buttermilk for 3 hours and then its outer coating is removed. This *Maricha* is also termed as *Shweta Maricha*. Purpose of this *Shodhana* might be to decrease pungent property of *Maricha* to

some extent. This *Shodhana* may be suggested where *Maricha churna* is used in individually not in combination with another drug. But in previous references of *Madhumalini Vasanta Rasa*, *Maricha Shodhana* prior its use in formulation has not been stated. In present study too, considering above facts *Maricha Shodhana* has not been performed for pharmaceutical convenience *Kukkutand rasa* is generally *Guru* and *Snigdha* in *guna*. It is *Madhura in Rasa* as well as in *Vipaka*. The *Kukkutand* is generally *Vatashamaka* and *Vrushya* and is widely used in *Vatavyadhi* and is given in cases of *Daurbalya* and *Kshaya*.

Eggs are a good source of essential mineral such as Calcium, iron, phosphorous, zinc and iodine. Eggs are rich in vitamin B especially vitamin B12, Vitamin A, D, E, K. It should be noted that very few food items contain Vitamin D, and egg is one of them.⁹ *Dadim Swaras* though said to be a *Bhavana dravya* plays a major role *Dadima* is *Laghu* and *Snigha* in *Guru* and has *Madhura*, *Kashaya* and *Amla Rasa*. The ripened fruit is *Madhura in Vipaka* whereas the unripen fruit is *Amla in Vipaka*. The *veerya of Dadima* is *Anushna*. The sweet fruit is *Tridoshgnha*. The fruit is said to be *Balya*. Modern studies show that Pomegranate juice is a rich source of Vitamin C and Antioxidant property.¹⁰

CONCLUSION

Madhumalinivasanta, is mentioned in earlier textbooks like *Rasachandanshu* is one of the important formulations. *Madhu Malini Vasanta Rasa* comes under *Khalviya Rasayana* category of *Rasaushadhi*. *Kharaliya Rasayana* is more popular than any other dosage form. The important principle involved in formulating *Khalviya Rasa* are *Samyojana* i.e. mixing of ingredients in specified manner and *Bhavana*. *Hingula* is a main ingredient. It is used as *Balya*, *Vrushya*, *Rasayana*, *Garbhavruddhikar*. It is used in chronic fever, cough, beneficial in pregnancy with debility, anaemia, asthma, chronic respiratory problems.

REFERENCES

1. Savrikar, S., and B. Ravishankar. "Introduction to 'Rasashastra'-The Iatrochemistry of Ayurveda."

- African Journal of Traditional, Complementary and Alternative Medicines 8.5S (2011).
2. *Rasa tantra sara va siddha prayoga samgraha*, Prathama Khanda Kharleeya Rasayana 12th edition 1980 published by Krishna Gopala Ayurveda Bhavan, pg no 367.
 3. Prof. Savarika S S, translator. *Rasa Chandanshu*, 1sted. New Delhi: Ken-driya Ayurved Vignana Anusandhan Parishad; 2011. P 302
 4. SS Savrikar, B Ravishankar, Introduction to 'Rasashastra' - The Iatrochemistry of Ayurveda, Afr J Tradit Complement Altern Med., 2011; 8: 79--81
 5. Bhudeb Mookerjee editor, *Rasa Jala Nidhi* Vol.2, chapter No.3, chaukhamaba prakashan Varanasi 1938; pg312
 6. Prof. Savarika S S, translator. *Rasa Chandanshu*, 1sted. New Delhi: Ken-driya Ayurved Vignana Anusandhan Parishad; 2011. P 177
 7. Prof. Savarika S S, translator. *Rasa Chandanshu*, 1sted. New Delhi: Ken-driya Ayurved Vignana Anusandhan Parishad; 2011. P 302
 8. Vd Gangadharshastri Gune "Aushdhi Gunadharma shastra", Vaidyak grantha bhandar 2001.pg 422
 9. Kadiri, M., A. W. Ojewumi, and S. O. Olawale. "Minerals, vitamins and chlorophyll contents of fruits, stems and leaves of tomato and garden egg." *Pakistan Journal of Food Sciences* 25.3 (2015): 150-154.
 10. Rahimi, Hamid Reza, Mohammad Arastoo, and Seyed Nasser Ostad. "A comprehensive review of Punica granatum (pomegranate) properties in toxicological, pharmacological, cellular and molecular biology researches." *Iranian journal of pharmaceutical research: IJPR* 11.2 (2012): 385.

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Rakesh Ganvir et al: Critical Review on Madhumalini Vasanta; A Kharaliya-Rasayana. *International Ayurvedic Medical Journal* {online} 2019 {cited January, 2020} Available from: http://www.iamj.in/posts/images/upload/2659_2663.pdf