

PRELIMINARY PHARMACEUTICO - ANALYTICAL STUDY OF *GAIRIKADI MALHARA* W.S.R TO RASATARANGINI¹*Dr. Vrushani Vyas, ²Dr. Rukminibai Koti and ³Dr. Meenu Bharti Sharma¹Assistant Professor, Department of Rasashastra and Bhaisajya Kalpana, AAMC & RI, Gandhinagar.²Professor and HOD, Department of Rasashastra and Bhaisajya Kalpana, G.J. Patel Ayurveda College, Vallabh Vidyanagar.³Assistant Professor, Post Graduate Department of Rasashastra Evum Bhaisajya Kalpana, J.S. Ayurved Mahavidyalaya, Nadiad.

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ABSTRACT

Malhara Kalpana is a useful for the purpose of *Bahirparimarjana* or external application. It is essentially use as a local application like *Varnya*, *Kandughna*, *Vranashodhana* and *Vranaropana* etc. *Malhara Kalpana* is the preparation which has *Siktha Taila* or *Ghrita* is a basic constituent. In this preparation, there are herbal and mineral contains like *Shuddha Gairika*, *Haridra Churna* and *Sindoora Churna* has been used. *Gairikadi Malhara* is perform as per *Rasatarangini* which is effective on *Kandu Daha Prashamana* and all type of *Vranaropana*. In *Gairikadi Malhara* all most contains have *Vranaropana*, *Kandughna* property. especially, *Shuddha Gairika* has a *Raktapitta Prashamana*, *Vishapaham*, *Kandughna*, *Udardnuta* properties. Following analytical parameters were examined during this study, Acid insoluble ash, total ash, loss on drying, alcohol soluble extractive value, water soluble extractive value, rancidity test, fat content, refractive index, glycosides, steroids, alkaloids. In this study, an attempt has to be done for preliminary Pharmaceutico- Analytical parameters of *Gairikadi Malhara*.

KEYWORDS: *Gairikadi Malhara*, *Ghrita*, *Siktha Taila*, *Rasatarangini*, Analytical study.

INTRODUCTION

Medicines are broadly classified in two categories as internal usage like tablets, capsules, syrups, *Choorna*, *Avaleha*, etc., and external usage like *Lepa*, powder, creams, lotions, *Malhara*, etc. In external wound, Skin infections, fungal infections, pain in any part of body external application plays a crucial role. In 19th century, the *Malhara* word from Unani *Vaidhyak* is adopted as a substitute for *Pradeha* or *lepa*. Firstly, *Yogaratanakara* has been mentioned that it is a *Malhara Kalpana*. Its name *Malhara Kalpana* because it removes *Mala* or residue from *Vrana*, *Tvakavikara* etc. conditions. It is similar to ointment of conventional medicine.^[1]

Gairikadi Malhara^[2] is a great combination of herbomineral formulation given by *Rasatarangini*, which is very effective in *Vranaropana* and *Kandu*. Its constituents are *Tila Taila*, *Siktha*, *Shuddha Gairika* (*Gairika* purified with *Go-ghrita*), *Haridra Churna* and *Sindoora Churna*. *Siktha Taila*^[3] acts as a base of preparation of *Malhara*. All most contains having *Raktaghna*, *Kandughna*, *Vranaropana* property. Especially, *Gairika* has a *Kandughna* and *Pittaraktnuta* property therefore effective in *Pittavikara*.^[4] Hence, *Haridra* has a *Katu*, *Tika* in *Rasa*, *Ushna Virya*, *Ruksha*, *Kaphapittanuta*, *Varnya*, *Tvakdosha*, *Shotha* and

Vranapaham.^[5] While *Sindoora* or *Girisindoora* has a *Kshudrakushtaghna*, *Tvachyam*, *Vranavishodhanam*, *Raktadoshanishudanam*.^[6]

MATERIAL AND METHODS

Gairikadi Malhara is developed on the basis of *Malhara Kalpana* process which is trituration method with *Siktha Taila* mentioned in *Rasatarangini*. *Gairikadi Malhara* is a herbomineral formulation having four ingredients in its composition.

Reference

सुवर्णगैरिकं शुद्धं तोलकैकमितं शुभम् । तन्मितां रजनीञ्चैव माषकं बालभूषणम् ॥

सिक्थतैलं च विमलं कर्षत्रितयसमितम् । सम्पेष्य खलु यत्नेन काचकुप्यां तु विन्यसेत् ॥

गैरिकाचो मल्हरो नामतः परिकीर्तितः । कण्डूदाहप्रशमना विविधन्नरोपणः ॥

(R.T.22/130-132)

Principle – Trituration.

Equipment

Weighing balance, Stainless Steel Vessel, Stainless Steel spatula, Gas stove, air tight glass bottle, Perceline *Kharala*.

Showing the ingredients for *Gairikadi Malhara*

Sr. No.	Ingredients	Quantity (g.)
1.	<i>Siktha Taila</i>	72
2.	<i>Shuddha Gairika</i>	12
3.	<i>Haridra Churna</i>	12
4.	<i>Sindoora Churna</i>	1

Procurement of raw Drug

Raw drug of *Gairikadi Malhara* was procured from Sundar Ayurved Pharmacy, J.S. Ayurved Mahavidyalaya, Nadiad.

Method of *Gairika Shodhana*^[7]

Gairika Shodhana was done by *Bharjana* (frying) method with little quantity of *Go-Ghrita* which is given by *Rasatarangini*.

Method of preparation *Gairikadi Malhara*

- ✓ Above mentioned ingredients of *Gairikadi Malhara* was taken and weighed properly.
- ✓ After that *Siktha Taila* was taken in Porceline *Kharala*.
- ✓ Addition of Powder drugs into *Kharala* one by one and trituration was done.
- ✓ The mixture of *Gairikadi Malhara* was triturated continuously to achieve homogeneity.
- ✓ After the completion of mixture finish product was stored in air tight glass bottle.

Plates showing images of ingredients and method of preparation of *Gairikadi Malhara*

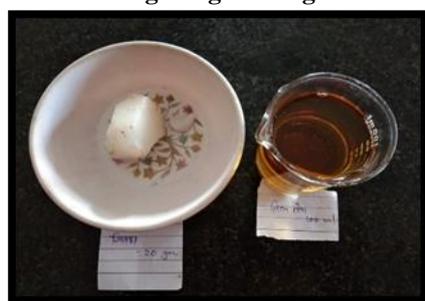


Fig. no.1.1



Fig. No.1.2



Fig. No. 1.3



Fig. No. 1.4



Fig. No. 1.5



Fig. No. 1.6



Fig. No. 1.7



Fig. No. 1.8

RESULTS

Sr.No.	Parameters	Results
1.	Initial Wt. of <i>Gairikadi Malhara</i> (<i>Siktha Taila</i> + <i>Shuddha Gairika</i> + <i>Haridra Churna</i> + <i>Sindoora Churna</i>)	72+12+12+1= 97
2.	Final wt. (g.)	62
3.	Loss/Gain in Wt. (g.)	Loss = 35 g.
4.	Yeild of <i>Gairikadi Malhara</i> (%)	63.91%

OBSERVATION

- ✓ All powders were passed through sieve no. 125.
- ✓ So, they were absorbed nicely in *Siktha Taila* when triturated well.
- ✓ Proper homogeneity was obtained.
- ✓ Final Mixture of Product converted into brownish color.

Precaution

- ✓ Powders must be fine.
- ✓ Trituration should be properly and in one direction.

Physicochemical Parameters of *Gairikadi Malhara*.

Sr.No.	Parameters	Results
1.	pH ^[8]	7.03
2.	Total Ash ^[9]	10.04%
3.	Acid insoluble Ash ^[10]	1.51%
4.	Loss on Drying ^[11]	0.89%
5.	Water soluble extractive value ^[12]	0.89% w/v
6.	Alcohol soluble extractive value ^[13]	2.4% w/v
7.	Refractive Index ^[14]	1.402

Phytochemical Parameters of *Gairikadi Malhara*.

Sr.No.	Parameters	Results
1.	Starch ^[15]	Absent
2.	Alkaloid ^[16]	Present
3.	Flavonoid ^[17]	Absent
4.	Saponin ^[18]	Absent
5.	Glycoside ^[19]	Present
6.	Tannin ^[20]	Absent
7.	Steroid ^[21]	Slightly present
8.	Rancidity ^[22]	Fat definitely oxidized
9.	Fat content ^[23]	Present

DISCUSSION

Gairikadi Malhara is an effective external application formulation in case of *Kandu* (Itching sensation), *Daha* (Burning sensation) and all type of wound healing which is given by Rasatarangini. *Gairika* which is prime drug of selected formulation having *Kandughna* and *Pittaraktanuta* property therefore effective in *Pittavikara*. *Siktha Taila* was also prepared by method of 1 part of *Siktha* and 6 part of *Tila Taila* which is given by Rasatarangini. Which is helpful for *Sheeta* (Winter) season of *Adanakaal*. It is Important formulation of Ayurved in that particular season on comparative of conventional medicine. In preparation of *Malhara*, *Siktha Taila* performed as a base. *Haridra* having *Katu*, *Tikta Rasa*, *Ushna Virya*, *Ruksha*, *Kaphapittahara*, *Varnya*, *Tvakdosha*, *Shotha* and *Vranapaham* as we can say that *Haridra* is very good for *Pitta* and *Raktavikara* so, good in Skin disease likewise *Sindoora* is best for *Kshudrakushthahara* property, *Tvachyam*, *Vranavishodhanam*, *Raktadoshanishudanam*. Here, an attempt has been made to preliminary pharmaceutico-analytical study of *Gairikadi Malhara* for that analytical

test as physico-chemical parameters like pH is 7.03, total Ash is 10.04%, Acid insoluble ash is 1.51%, Loss on drying is 0.89%, Water soluble extractive value is 0.89% w/v, Alcohol soluble extractive value is 2.4% w/v, Refractive Index is 1.402.

CONCLUSION

A batch of *Gairikadi Malhara* was prepared on classical basis and evaluated all the possible parameters. The present study suggests that *Gairikadi Malhara* can be used as external application for the condition of Itching and Burning sensation and all type of wound healing presentation over the skin.

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